

SAUDI PREPARED MEDIA LABORATORY CO. LTD AN ISO 9001: 2008 CERTIFIED COMPANY Pioneers in MICROBIOLOGY PEREPARED CULTURE MEDIA Since 1984

www.spml.com.sa



Dear Customer,

SAUDI PREPARED MEDIA LABORATORY Co. LTD.



(SPML) is a wholly owned ISO 9001:2008 accredited Saudi company, distributing a complete range of freshly prepared, ready to use, Microbiological Culture Media for Clinical, Industrial, Food, Dairy & Pharmaceutical Microbiology. We have been supplying media to laboratories in hospitals and clinics, industries throughout the kingdom of Saudi Arabia and Middle East for more than two decades.

Company fully committed to provide first class diagnostic media products and associated services for our valued Customers. We achieve this by being a pro-active Customer focused organization and through the implementation of a Quality Management System to ISO 9001: 2008.

Objectives are established so that we can always provide first class timely services to the demanding requirements of the health sector and other microbiological testing facilities. As part of our commitment to continual improvement, systems are established to ensure that we measure the performance of our processes, review, and revise our policies and processes when necessary.

With regard to our employees, the Company policy will ensure that they have a high level of competence and awareness of the Company's Quality Objectives. This will be achieved mainly through our systems for training and (CPD) Continuous Professional Development.

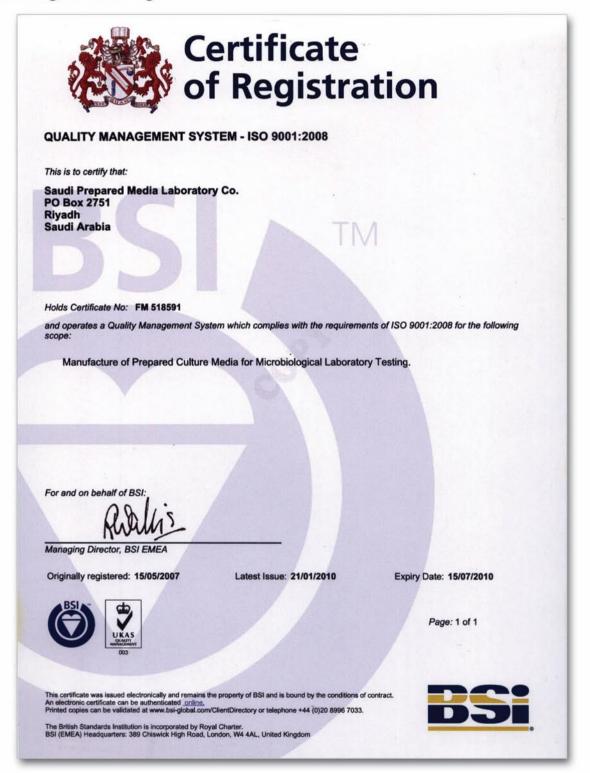
Since prepared media have short shelf-life, requiring refrigerated storage and careful handling, it is advantageous for laboratories within the Kingdom to be supplied by SPML rather than running the risk of importing. It significantly reduces the risk of late shipments and deterioration of the product.

I thank you, our present customers, for your loyalty and patronage, and we will continue to maintain and improve our high standards for quality and service to give you the best products possible. For those who are purchasing SPML's products for the first time, welcome and thank you for giving us an opportunity to serve you.

Yours Truly,

Marwan Alnekhaish President

Quality Policy



The Management of SAUDI PREPARED MEDIA LABORATORY CO. LTD. Is fully committed to providing first class diagnostic media products and associate services for our valued customers. We achieve this by being a pro-active Customer focused organization and through the implementation of a Quality Management system ISO 9001-2008



Product Information

General:

Sterile Defibrinated Sheep Blood is used in all products containing blood unless otherwise indicated.

SPML Guarantees that all our products will perform satisfactorily, provided that they have been stored as directed and are used prior to their expiry date.

The liability of SPML is limited to product replacement. In the event that a product is defective, SPML will replace, if the product is determined to have been defective at the time of shipment. Requests for replacement must be received within one week after the delivery.

No replacement will be given for arbitrarily returned product. The batch number, expiry date, date of receipt and the nature of problem must be given to the operation manager in order that the problem is investigated.

Enquiries regarding product, packaging or deliveries are welcomed. Requests for quotations and information regarding new products are also invited.

Quality Control

All SPML products are extensively tested by our Quality Control laboratory. No product will be released unless it has passed all our quality criteria. The criteria, which are tested, are as follows:

- 1. Sterility
- 2. Growth Promotion /Inhibition
- pH Value
- 4. Appearance
- Packing & Labeling

The above criteria are tested in accordance with the CLSI / NCCLS document M22-A3, Quality Assurance for Commercially Prepared Microbiological Culture Media.

• Storage

Do not freeze and avoid prolonged exposure to direct light. This may cause discoloration of many media, thus affecting their performance. Store in the packaging provided so as to avoid excess water loss.

• SHELF LIFE

Due to the nature of Culture Media, our product have a limited shelf-life. This shelf life is dependent upon the form of media and its constituents.

Shelf-life of SPML products varies from 8 – 10 weeks for plated media and 6 months to a year for tube media.

The expiry date of each product is printed on the product label or box, plated media and tube media that is expired should not be used.

Precautions in the use and disposal of Prepared Media

The inoculation of culture media whether deliberately or accidentally leads to the production of very large quantities of micro-organisms. High concentrations of any organism are potentially hazardous and must be handled and disposed of safely by suitably qualified staff and by approved methods.

SPML products should only be used by qualified personnel who have been trained in microbiological procedures. Specimens and cultures should be carefully handled and finally autoclaved prior to disposal.

Ordering

The following information is required to process an order:

- 1. Purchase Order number
- 2. Full product description and catalogue number
- 3. Quantity and unit size
- 4. Delivery and billing address
- 5. Telephone number, Fax number or E-mail address

Packing

All SPML products are produced in either plastic Petri-dish or borosilicate glassware.

All defibrinated animal blood products are available in milliliters PETG bottles and also other specific packaging can be arranged as per customer's requirements. To provide timely delivery of SPML products, we shall arrange shipment within 24 hours of collection any day Saturday through Wednesday. Certificate of analysis confirming sterility reports can be arranged upon request. In respect that customers may order to their requirements we have distinct group of products which are distinguished by the first number of the catalogue number For example:

- 1. 90mm single compartment Petri dish
- 2. 90mm two compartment Petri dish
- 3. Blood cultures
- 4. 150 mm Petri dish
- 5. Tube Media
- 7. Antibiotic discs
- 8. Blood products
- SPML plated culture media are packed in sleeves of 10 units under laminar flow conditions. All orders must be placed in multiples of ten
- SPML tube media are available in pack size of 10 & 100.
- All packaging, both plastic & glass are intended for one time use only and are therefore non returnable and reusable.

Shipping

- All perishable and frozen products will be shipped by most convenient method Saturday through Wednesday to avoid weekends.
- For our overseas customers Monday through Thursday shipment can be arranged by fastest means available.
- Subject to differ from distributor agreement shipping and handling charges will be prepared and added to the invoice.
- We encourage the use of standing orders so as to minimize the possibility of delays or backorders.
- Telephone, Fax & E-mail orders are acceptable; however please allow 5 days for preparation, QC test and dispatch of your order.

Terms and Conditions

- Our terms are C.O.D. (Cash/Cheque Collect on Delivery) unless other prior arrangements have been made.
- Requests for credit must be addressed to the operations manager and facilities will be awarded at his discretion.

Website

We maintain an extensive website that contains a complete listing of all our products. Our rapid search mechanisms will assist you in quickly finding the products you need.

• Special Media Requests Welcome

If you have an out-of-the-mainstream culture medium need, call us. Our manufacturing facility is organized for maximum flexibility. In fact our lab scientists will be happy to discuss your unique needs at any time.

• Certificate of Analysis

Our Quality Control Lab will provide Certificate of Analysis for entire product upon request; also it will be accessible from our website very soon.

Please visit: www.spml.com.sa

• Among our more regualar Customers are such distinguished Hospitals Namely:

MINISTRY OF HEALTH (MOH)

SAUDI ARABIA

KING FAHAD NATIONAL GUARD HOSPITAL RIYADH

KING FAISAL SPECIALIST HOSPITAL RIYADH

KING KHALID EYE SPECIALIST HOSPITAL RIYADH

SECURITY FORCES HOSPITAL RIYADH

ARMED FORCES HOSPITAL RIYADH / K. MUSHAYT

SAUDI ARAMCO HEALTH CENTER DHAHRAN

SAUDI ARAMCO RESEARCH & DEVELOPMENT CENTER DHAHRAN

KING KHALID NATIONAL GUARD HOSPITAL JEDDAH

KING ABDUL NAVAL BASE HOSPITAL JUBAIL

KING FAHAD MILITARY MEDICAL COMPLEX DHAHRAN



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Applications of SPML Culture Media

DAIRY INDUSTRY

FOOD INDUSTRY

WASTE WATER TREATMENT

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COSMETIC INDUSTRY

PHARMACEUTICAL INDUSTRY

MEDICAL MICROBIOLOGY

VETERINARY TREATMENT

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PRODUCT LIST WITH CODES

MONO PLATES NO CODE PRODUCT **BACILLUS CERUS** BACTEROIDES BILE ESCULIN MEDIA BAIRD PARKER AGAR BCYE AGAR W/O L-CYST **BILE ESCULIN AGAR** BILE ESCULIN AZIDE AGAR W/VANCO BILE ESCULIN W/ AZIDE AGAR BRAIN HEART INFUSION AGAR BRAIN HEART INFUSION BLOOD AGAR BRUCELLA MODIFIED BLOOD AGAR C.E.M.O. HORSE BLOOD AGAR CAMPY 5 10% BLOOD AGAR CAMPYLOBACTER LAKED BLOOD AGAR CETRIMIDE AGAR CHOCOLATE AGAR CHOCOLATE BACITRACIN AGAR CHOCOLATE ISOSENSITEST AGAR CHROMagar CANDIDA CHROMagar ECC CHROMagar ECOLI CHROMagar MRSA CHROMagar ORIENTATION CHROMagar PSEUDOMONAS CHROMagar SALMONELLA CHROMagar VIBIRIO **CLED MEDIUM** CLED MEDIUM W/ ANDREADES CLOSTRIDIUM DIFFICILE SELECTIVE AGAR COLUMBIA HORSE BLOOD AGAR COLUMBIA PNBA AGAR **CORNMEAL AGAR** D.C.L.S. AGAR **DENT MEDIUM** DNASE AGAR PLAIN

MONO PLATES NO PRODUCT CODE DNASE W/ TOLUIDINE BLUE DOXYCHOLATE CITRATE AGAR - DCA DST AGAR **EDWARDS MEDIUM** FARRELL'S MEDIUM **GARDNERELLA SELECTIVE AGAR** GC AGAR BASE 1% DGS HEKTOEN ENTERIC AGAR **HOYLES MEDIUM** ISOSENSITEST AGAR K-V LAKED BLOOD AGAR LEGIONELLA BCYE AGAR LEGIONELLA GVPC AGAR LETHEEN AGAR LEVINE EMB AGAR LISTERIA SELECTIVE AGAR m Endo AGAR MACCONKEY AGAR MACCONKEY AGAR W/CV MACCONKEY SORBITOL AGAR MANNITOL SALT AGAR MANNITOL SALT W/ OXACILLIN MH W/ 4% NACL & 6 MCG OXACILLIN M-H AGAR W/4% NACL & METHICILLIN MH W/ 2% NACL M-H W/ 6 MCG VANCOMYCIN MIDDLE BROOK 7H11 AGAR MODIFIED LECITHIN AGAR MEDIUM MODIFIED TINSDALE MEDIUM MUELLER HINTON AGAR MUELLER HINTON BLOOD AGAR MUELLER HINTON CHOCOLATE AGAR MUELLER HINTON LAKED BLOOD AGAR MYCOLOGICAL AGAR W/ C&C MYCOPLASMA SELECTIVE AGAR NEOMYCIN ANAEROBE BLOOD AGAR

MONO PLATES NO PRODUCT CODE NUTRIENT AGAR PHENYLETHYL ALCOHOL AGAR (PEA) PLATE COUNT AGAR POTATOE DEXTROSE AGAR - PDA PRESTONS CAMPY AGAR PSEUDOMONAS AGAR F R2A AGAR SAB DEX BHI AGAR SAB DEX BHI AGAR W/ C & C SAB DEX BHI AGAR W/ G & C SABOURAUD DEXTROSE 50>S SABOURAUD DEXTROSE AGAR SABOURAUD DEXTROSE W/ CHLORAMPHENICOL SABOURAUD DEXTROSE W/ P & S SALMONELLA SHIGHELLA AGAR SHEEP BLOOD AGAR SHEEP BLOOD AGAR # 2 STARCH AGAR T.C.B.S AGAR TDT AGAR THAYER MARTIN AGAR TRYPTIC SOYA AGAR TRYPTIC SOYA AGAR 50>S TSA W/LECTN & POLY RODAC VANCOMYCIN IN BHI AGAR VIOLET RED BILE AGAR XLD MEDIUM YEAST & MOULD AGAR YERSINIA CIN SELECTIVE AGAR 100 COLUMBIA SHEEP BLOOD AGAR 101 SABOURAUD DEXTROSE AGAR W/CYCLOHEXMIDE & CHLORAMPHENICOL 102 CORN MEAL AGAR and TWEEN 80 103 SHEEP BLOOD AGAR with SPS 104 C.E.M.O - A HORSE BLOOD AGAR 105 C.E.M.O - AS HORSE BLOOD AGAR 106 CHROMagar STREP B

	Bi-Plates 90mm	
NO	PRODUCT	CODE
1	CHOCOLATE / SHEEP BLOOD AGAR	2010
2	CHOCOLATE / THAYER MARTIN AGAR	2080
3	CHOCOLATE BAC / SBA W/ GENTAMYCIN	2018
4	CHROMagar PSEUDOMONAS / CETRIMIDE AGAR	2012
5	CHROMagar VIBRIO / TCBS AGAR	2011
6	CLED / CLED AGAR	2033
7	CLED/MACCONKEY	2030
8	COLUMBIA HORSE BLOOD / CLED AGAR	2035
9	COLUMBIA HORSE BLOOD / MACCONKEY CV	2050
10	COLUMBIA PNBA / MACCONKEY CS	2040
11	GARDNERELLA / THAYER MARTIN AGAR	2015
12	GARDNERELLA SELECTIVE/GARDNERELLA SELECTIVE	2051
13	HOYLE / HOYLE	2052
14	LEVINE EMB / CLED AGAR	2037
15	MACCONKEY / MACCONKEY	2058
16	MANNITOL / MACCONKEY CS	2043
17	MANNITOL SALT /MNNITOL SALT AGAR	2045
18	MH 4% SALT / MH 4% SALT OXACILLIN	2025
19	SALMONELLA / HEKTOEN ENTERIC	2028
20	SALMONELLA / MACCONKEY AGAR	2026
21	SALMONELLA / TCBS	2046
22	SALMONELLA SHIGELLA/HEKTOEN	2048
23	SALMONELLA SHIGELLA/SALMONELLA SHIGELLA	2084
24	SDA / MYCOLOGICAL AGAR	2075
25	SHEEP BLOOD / CLED AGAR	2023
26	SHEEP BLOOD / MACCONKEY AGAR W/O CV	2021
27	SHEEP BLOOD / MACCONKEY W/ CS	2020
28	SHEEP BLOOD /SABOURAUD DEXTROSE	2009
29	XLD AGAR / XLD AGAR	2096

	Mono 150 mm	
NO	PRODUCT	CODE
1	HAEMOPHILUS TEST MEDIUM	4040
2	MUELLER HINTON AGAR	4010
3	MUELLER HINTON BLOOD AGAR	4020
4	MUELLER HINTON CHOCOLATE AGAR	4030
5	SABOURAUD DEXTROSE AGAR	4045
6	SHEEP BLOOD AGAR	4050
7	TRYPTIC SOYA AGAR	4055

	Media for petroleum Microbiology	
NO	PRODUCT	CODE
1	GENERAL AEROBIC BACTERIA BROTH IN 10% QURAYYA SEAWATER	3501
2	GENERAL AEROBIC BACTERIA BROTH IN 100% QURAYYA SEAWATER	3500
3	GENERAL AEROBIC BACTERIA BROTH IN 15 % QURAYYA SEAWATER	3507
4	GENERAL AEROBIC BACTERIA BROTH IN 5% QURAYYA SEAWATER	3506
5	SULPHATE REDUCING BACTERIA BROTH IN 10% QURAYYA SEAWATER	3503
6	SULPHATE REDUCING BACTERIA BROTH IN 100% QURAYYA SEAWATER	3502
7	SULPHATE REDUCING BACTERIA BROTH IN 15% QURAYYA SEAWATER	3510
8	SULPHATE REDUCING BACTERIA BROTH IN 5% QURAYYA SEAWATER	3509
9	YEAST & MOULD (Y/M) BROTH IN 10 % QURAYYA SEAWATER	3504
10	YEAST & MOULD (Y/M) BROTH IN 5 % QURAYYA SEAWATER	3505

	TUBE MEDIA	
NO	PRODUCT	CODE
1	ACID EGG MEDIUM	5002
2	ACID EGG MEDIUM WITH PYRUVATE	5003
3	ALKALINE PEPTONE WATER	5007
4	BILE ESCULIN AGAR	5025
5	BLOOD AGAR SLANT	5030
6	BHI AGAR SLANT	5040
7	BHI AGAR SLANTW/ 6.5% NACL	5041
8	SABHI AGAR SLANT	5044
9	SABHI AGAR WITH C & C SLANT	5046

	TUBE MEDIA	
NO	PRODUCT	CODE
10	BHI BROTH	5050
11	BHI BROTH WITH SALT	5051
12	BRILLIANT GREEN 2% BILE BROTH	5052
13	CETRIMIDE AGAR SLANT	5057
14	CHOCOLATE AGAR SLANT	5060
15	COOKED MEAT MEDIUM 10ML (16x125)	5065
16	COOKED MEAT MEDIUM 10ML (20x125)	5066
17	CTA BASE	5070
18	CTA WITH1% DEXTROSE	5074
19	CTA WITH 1% LACTOSE	5077
20	CTA WITH 1% MALTOSE	5078
21	CTA WITH 1% TREHALOSE	5079
22	CTA WITH 1% MANNITOL	5080
23	CTA WITH 1% RAFFINOSE	5081
24	CTA WITH 1% SUCROSE	5083
25	DERMATOPHYTE TEST MEDIUM	5085
26	DORSET EGG MEDIUM	5087
27	DECARBOXYLATE BROTH W/ 1% ARGININE	5090
28	DECARBOXYLATE BROTH W/ 1% L-LYSINE	5091
29	DECARBOXYLATE BROTH W/ 1% L-ORNITHINE	5092
30	FLUID THIOGLYCOLLATE MEDIUM	5095
31	GRAM NEGATIVE BROTH	5100
32	HIPPURATE BROTH	5102
33	MODIFIED LETHEEN BROTH MEDIUM 9ML	5103
34	LACTOSE BROTH (DS) - DOUBLE STRENGTH	5105
35	LACTOSE BROTH (SS) - SINGLE STRENGTH	5106
36	LAUREL TRYPTOSE BROTH (DS)	5107
37	LAUREL TRYPTOSE BROTH	5108
38	LOEFFLER SERUM MEDIUM	5109
39	LOWENSTEIN JENSEN WITH GLYCEROL	5110
40	L-J WITH 5% SALT	5111
41	L-J DEEPS	5112
42	L-J WITH PYRUVATE SLANT	5113
43	L-J WITH PABA	5114

TUBE MEDIA PRODUCT CODE NO LYSINE IRON AGAR SLANT L-J WITHOUT GLYCEROL LETHEEN BROTH MACCONKEY BROTH MACCONKEY BROTH - DS MIDDLEBROOKE 7H10 AGAR MIDDLEBROOKE 7H9 WITH GLYCEROL MIDDLEBROOKE 7H9 WITH TWEEN 80 MIL - MOTILITY INDOLE LYSINE M-H BROTH M-H BROTH 10ML MYCOBACTERIUM AGAR MYCOLOGICAL AGAR SLANT MYCOPLASMA BROTH NITRATE BROTH NUTRIENT AGAR SLANT NUTRIENT AGAR ALIQUOT **NUTRIENT BROTH O-F MEDIUM** O-F MEDIUM WITH 1% DEXTROSE O-F MEDIUM WITH 1% SUCROSE O-F MEDIUM WITH 1% XYLOSE O-F MEDIUM WITH 1% SALICIN O-F MEDIUM WITH 1% SORBITOL OIM MEDIUM **ONPG** PEPTONE WATER PHENOL RED BROTH WITH 1% GLUCOSE PHENOL RED BROTH WITH 1% MALTOSE PHENOL RED BROTH WITH 1% SUCROSE PHENOL RED BROTH WITH 1% SALICIN PHENYLALANINE AGAR SLANT BUFFERED PEPTONE SOL'N W/ LECITHIN & TWEEN 80 TSB WITH LECITHIN AND TWEEN 80 LACTOSE BROTH WITH LECITHIN & TWEEN 80

	TUBE MEDIA	
NO	PRODUCT	CODE
79	RINGER SOLUTION	5182
80	SAB-DEXTROSE AGAR SLANT	5190
81	SALINE SOLUTION 0.85%	5200
82	SALINE SOLUTION 0.85% 10ML	5201
83	POTATOE DEXTROSE AGAR	5203
84	PURPLE SALT BROTH 6.5%	5204
85	SALT BROTH 6.5% (8ML)	5205
86	MIDDLEBROOKE 7H11 AGAR	5208
87	SELENITE BROTH 8ml	5210
88	SELENITE CYSTINE BROTH	5211
89	SELENITE BROTH 1 LITRE	5212
90	SIMMONS CITRATE AGAR SLANT	5215
91	SIM MEDIUM	5218
92	SODIUM HYDROXIDE 4%	5221
93	THIOGLYCOLLATE WITH HEMIN	5224
94	TODD-HEWITT (GBS) SELECTIVE	5226
95	TODD-HEWITT BROTH	5227
96	TRICHOMONAS MEDIUM	5228
97	TRIPLE SUGAR IRON AGAR SLANT	5229
98	TRIPTIC SOYA AGAR SLANT	5232
99	TRYPTIC SOYA BROTH 4ML	5235
100	TSB WITH GLYCEROL	5236
101	TSB 10ML	5245
102	TETRAZOLIUM BROTH	5250
103	TSB WITH 5% TWEEN 80	5260
104	UREA AGAR SLANT 4ML	5279
105	UREA AGAR SLANT 8ML	5280
106	UREA BROTH	5282
107	UREA INDOLE MOTILITY - UIM	5284
108	DEIONIZED WATER	5290
109	DEIONIZED WATER WITH 0.02% TWEEN 80	5295
110	LURIA BERTANI	5296
111	RAPPAPORT VASSILIADIS SOYA BROTH	5297
112	MR - VP BROTH	5253
113	MOTILITY TEST MEDIUM	5004

	Bottled Media	
NO	PRODUCT	CODE
1	AEROBIC BLOOD CULTURE 50ML (BHI)	3010
2	AEROBIC PAEDIATRIC BLOOD CULTURE 20ML	3000
3	ANAEROBIC BLOOD CULTURE 50ML (THIO)	3050
4	ANAEROBIC PAEDIATRIC BLOOD CULTURE 20ML	3005
5	FLUID THIOGLYCOLLATE MEDIUM 100ML	3029
6	FLUID THIOGLYCOLLATE MEDIUM 200ML	3029-A
7	FLUID THIOGLYCOLLATE MEDIUM 20ML	3028
8	TDT AGAR 100ml BOTTLE	3089
9	TDT BROTH 100ml BOTTLE	3051
10	TRYPTIC SOYA AGAR 1000 ml	6093
11	TRYPTIC SOYA BROTH 100ML	3036
12	TRYPTIC SOYA BROTH 200ML	3036-A
13	TRYPTIC SOYA BROTH 50ML	3036-B

Blood Products			
NO	PRODUCT	VOLUME	CODE
1	EGG YOLK EMULSION	100ML	8520
2	EGG YOLK TELLURITE	100ML	8521
3	FOETAL CALF SERUM	50ML	8111
4	FOETAL CALF SERUM	100ML	8110
5	HAEMOGLOBIN 2% SOLUTION	100ML	8535
6	HAEMOGLOBIN, DRIED BOVINE	10 G	8090
7	HAEMOGLOBIN, DRIED BOVINE	100 G	8093
8	HORSE BLOOD, DEFIBRINATED	25ML	8066
9	HORSE BLOOD, DEFIBRINATED	50ML	8062
10	HORSE BLOOD, DEFIBRINATED	100ML	8060
11	HORSE BLOOD, DEFIBRINATED	250ML	8057

Blood Products			
NO	PRODUCT	VOLUME	CODE
12	HORSE BLOOD, DEFIBRINATED	500ML	8055
13	HORSE BLOOD, LAKED	25ML	8076
14	HORSE BLOOD, LAKED	100ML	8078
15	HORSE SERUM	50ML	8180
16	HORSE SERUM	500ML	8185
17	INACTIVATED CALF SERUM	50ML	8143
18	INACTIVATED CALF SERUM	100ML	8175
19	MIDDLE BROOK OADC ENRICHED	100ML	8545
20	NEW BORN CALF SERUM	50ML	8121
21	NEW BORN CALF SERUM	100M	8141
22	OX BLOOD, ALSEVERS 1:1	25ML	8027
23	RABBIT BLOOD, DEFIBRINATED	100ML	8086
24	RABBIT PLASMA, COAGULASE	25 ML	8088
25	SHEEP BLOOD, DEFIBRINATED	25ML	8015
26	SHEEP BLOOD, DEFIBRINATED	50ML	8012
27	SHEEP BLOOD, DEFIBRINATED	100ML	8010
28	SHEEP BLOOD, DEFIBRINATED	250ML	8007
29	SHEEP BLOOD, DEFIBRINATED	500ML	8005
30	SHEEP BLOOD, ALSEVERS 1:1	25ML	8026
31	SHEEP BLOOD, ALSEVERS 1:1	100ML	8020
32	SHEEP BLOOD, ALSEVERS 1:1	500ML	8018
33	SHEEP BLOOD, CITRATED	25ML	8030
34	SHEEP BLOOD, CITRATED	100ML	8033
35	SHEEP BLOOD, CITRATED	500ML	8035
36	SHEEP BLOOD, LAKED	25ML	8046
37	SHEEP BLOOD, LAKED	100ML	8040
38	TRYPTIC SOYA AGAR	250ML	8550

	Non SPML Products with Codes	
NO	PRODUCT	CODE
1	AMIES LIQUID TRANSPORT SWAB	9150
2	AMIES TRANSPORT SWAB	9140
3	ANAEROBIC GAS PACK 10/BOX	9216
4	ANAEROBIC INDICATOR STRIPS 100/BOX	9221
5	ANAEROBIC JAR W/ ACCESSORIES	9210
6	API 20 E ID TEST KIT (25 TESTS)	9301
7	API REAGENT KIT	9302
8	CAMPY GAS PACK 10/BOX	9217
9	CARY BLAIR TRANSPORT SWAB	9160
10	CATALYST 10/BOX	9219
11	CHARCOAL TRANSPORT SWAB	9145
12	CHLAMYDIAL TRANSPORT SWAB	9170
13	CO 2 GAS PACK 10/BOX	9218
14	DISC DISPENSER	9560
15	CULTURE TRANSPORT SWAB, AMIES	9142
16	CULTURE TRANSPORT SWAB, CHARCOAL	9143
17	PLAIN STERILE SWAB	9135
18	STUART TRANSPORT SWAB	9155
19	VIRAL TRANSPORT SWAB	9165
20	VIROCULT SWINE FLU H1N1 SWABS (DUO)	9141







BACILLUS CEREUS SELECTIVE AGAR

BACILLUS CEREUS SELECTIVE AGAR BASE (MYP) (Mannitol-Egg Yolk Polymyxin) has been adapted to meet the nutritional needs of Bacillus cereus, and was proposed by Mossel et al. (1967) for the enumeration, detection and isolation of Bacillus cereus in food.



• Micro Organism Reactions

pH: 7.20 - 7.40

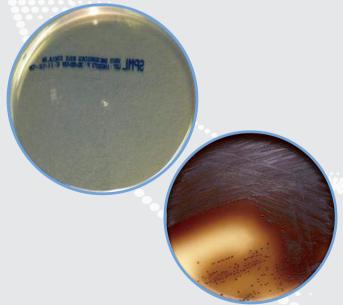
Organism	Result, Color of Colony
B. Cereus	Bright Pink colonies
S. Aureus	Inhibited Yellow colonies
Proteus mirabilis	Inhibited colorless

Code: 1013

Code: 1005

BACTEROIDS BILE ESCULIN AGAR

Bacteroides Bile Esculin Agar is a primary plating medium for the selective isolation and presumptive identification of the B. fragilis group. Selective inhibition of facultative anaerobes and most gramnegative anaerobic organisms is obtained by the presence of gentamicin and oxgall. Differentiation of the B. fragilis group is based on esculin hydrolysis, which produces esculetin and dextrose. The esculin reacts with the iron salt (ferric ammonium citrate) contained in the medium to produce a dark brown to black complex that appears in the medium surrounding colonies of members of the B. fragilis group. Bacteroides Bile Esculin Agar (BBE) is recommended as a primary isolation medium for the selection and presumptive identification of the B. fragilis



Bacteroides Fragilis

• Micro Organism Reactions

pH: 6.80 - 7.20

Organism	Result, Color of Colony
Bacteroides Fragilis	Good
Clostridium Perfringens	None
Escherichia Coli	None
Staphylococcus Aureus	None

Code: 1002

Code: 1003

BAIRD PARKER AGAR

In response to the requests from companies in the food industry we have started manufacturing this product. Baird Parker Agar is a selective and diagnostic medium for the isolation and enumeration of Staphylococcus Aureus in foods.



• Micro Organism Reactions

pH: 6.60 - 7.00

Organism	Result, Color of Colony
Staphylococcus aureus	Growth-Black colony with halo
Staphylococcus epidermidis	Growth-Black colony without halo

BILE ESCULIN AGAR

Bile Esculin Agar is recommended for the presumptive identification of Group D Streptococci by their ability to hydrolyze esculin. Due to presence of iron in the medium, esculin hydrolyzing organisms produce dark brown to black colored colonies.





Enterococcus faecalis
Growth with darkening of medium

• Micro Organism Reactions

pH: 6.40 -6.80

Organism	Result, Color of Colony
Enterococcus faecalis	Growth - brown
	black colonies
Streptococcus pyogenes	Inhibited
Escherichia coli	Growth - Colorless Colonies

BILE ESCULIN AZIDE AGAR W/VANCOMYCIN Code: 1004

Bile Esculin Azide Agar with Vancomycin is recommended for use as a direct screening medium in the isolation and presumptive identification of vancomycin-resistant enterococci /group D streptococci, such as Enterococcus faecalis and Enterococcus faecium, from fecal and rectal cultures.

BEA with Vancomycin is a differential and selective medium that allows for the rapid isolation of VRE from heavily contaminated specimens. The basal medium contains esculin to detect esculin hydrolyzing microorganisms, ferric citrate to provide ferric ions, and bile salts to inhibit gram-positive bacteria other than group D streptococci. Gram-negative bacteria are inhibited by sodium azide. Thus, the tolerance to the bile and hydrolysis of esculin provide the means to presumptively identify group D streptococci. Growth of group D streptococci on Bile Esculin Azide Agar supplemented with vancomycin denotes the presence of a vancomycin-resistant strain.

Micro Organism Reactions

pH: 6.40 - 6.80

Organism	Result, Color of Colony
Enterococcus faecalis	Growth with blackening in medium surrounding colonies
Escherichia coli	Inhibited

BILE ESCULIN AZIDE AGAR

Used for isolating, differentiating and presumptive identification of group D streptococci.



Enterococcus faecalis

Micro Organism Reactions

pH: 6.90 - 7.10

Organism	Result, Color of Colony
Enterococcus faecalis	Growth, Blackening of medium
Escherichia coli	Inhibited

Code: 1006

Code: 1012

Code: 1011

BRAIN HEART INFUSION AGAR

This is a very nutritious general-purpose medium suitable for the isolation of most organisms including many fastidious anaerobes. It is particularly recommended for streptococci and neisseria.



Micro Organism Reactions

pH: 7.20 - 7.60

Organism	Result, Color of Colony
Escherichia coli	Grey/opaque colonies
Staphylococcus	Cream/yellow colonies
aureus	

Escherichia coli Grey/opaque colonies

BRAIN HEART INFUSION AGAR & 5% BLOOD

A non – selective medium enriched with 5% Fibrinogen defibrinated sheep blood for the growth and isolation of fastidious organisms. Typical alpha and beta haemolysis can be observed by haemolytic bacteria such as Streptococci and Clostridium species. With a 35ml fill volume this medium is ideal for more prolonged incubations





• Micro Organism Reactions

pH: 7.20 - 7.60

Organism	Result, Color of Colony
Streptococcus pneumoniae	Growth – Gray flat colony
Streptococcus pyogenes	Growth – Gray round colony
Staphylococcus aureus	Growth - White / Golden Yellow colony
Bacteroides fragilis	Growth – Gray colony
Clostridium perfringens	Growth – Gray colony

Streptococcus pneumoniae colonies growing on BHI Agar with Blood

BRUCELLA MODIFIED BLOOD AGAR

A non – selective medium enriched with 5% defibrinated sheep blood for the growth and isolation of fastidious organisms. Typical alpha and beta haemolysis can be observed by heamolytic bacteria such as Streptococci and Clostridium species.



Micro Organism Reactions
 pH: 7.3 – 7.77

Organism	Result, Color of Colony
Streptococcus pneumoniae	Growth - Gray colony
Streptococcus pyogenes	Growth - Gray colony
Staphylococcus aureus	Growth - White / Golden Yellow
Bacteroides fragilis	Growth – Gray
Clostridium perfringens	Growth – Gray

Code: 1018

C.E.M.O MEDIUM W/HORSE BLOOD AGAR Code: 1026

This is a medium for the cultivation of Taylorella equigenitalis, the Contagious Equine Metritis Organism. Taylorella equigenitalis causes acute metritis among mares and appears to be venereally transmitted. When culturing genital swabs from mares and stallions on non selective media, inhibition and overgrowth of the contagious equine metritis organisms by contaminating organisms poses a considerable problem. Most of C.E.M organisms are streptomycin resistant and can be cultured on media supplemented with Amphotericin B and streptomycin to suppress growth of commensal organisms. When culturing genital samples, inhibition and overgrowth of the contagious equine metritis organism (C.E.M.O.) by contamination organism poses a considerable problem. Therefore it is recomended to use CEMO agar with Amphotericin B and Streptomycin and CEMO agar with Amphotercin B. Most strains of the organism are streptomycin resistant and can be cultured on media supplemented with amphotercin B and streptomycin to suppress growth of commecsal organisms. A number of strains of the C.E.M organism do however appear to be sensitive to streptomycin; therefore media supplemented with amphotercin B alone should be run in parallel. C.E.M.O Horse blood agar is based on the formulation by Artherton for the isolation of Taylorella equigenitalis. The medium contains Amphotericin B and Streptomycin.

Micro Organism Reactions1

pH: 7.30 - 7.70

Organism	Specification (with Amphotercin B and Streptomycin)	Specification (with Amphotercin B)
Candida Krusei	No Growth	No Growth
Escherichia Coli	No Growth	Growth
Staphy lococcus aureus	No Growth	Growth
Taylorella equigenitalis	Growth	Growth

Code: 1021

Code: 1020

CAMPY 5, 10% BLOOD AGAR

Similar to Campy Laked Blood Agar except defibrinated sheep blood at 10% is substituted for the laked horse blood at 7%.



• Micro Organism Reactions

pH: 7.30 – 7.70

Organism	Result, Color of Colony
Campylobacter jejuni	Growth - Gray, Round
Escherichia coli	No growth
Proteus mirabilis	No growth
Staphylococcus aureus	No growth
Candida albicans	No growth

Growth of Campylobacter jejuni

CAMPY LAKED BLOOD AGAR

A highly selective medium for the isolation and identification of Campylobacter species. This medium is enriched with 7% Laked Horse Blood and made selective by the addition of a selection of five antibiotics as per the formulation of Blazer - Wang



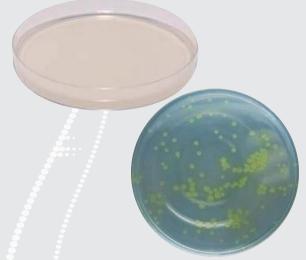
• Micro Organism Reactions

pH: 7.30 - 7.70

Organism	Result, Color of Colony
Campylobacter jejuni	Growth –Gray, Round colony
Escherichia coli	No growth
Proteus mirabilis	No growth
Staphylococcus aureus	No growth
Candida albicans	No growth

CETRIMIDE AGAR

A medium for the selective isolation of Pseudomonas Aeruginosa. Cetrimide is quarternary ammonium compound which inhibits the growth of almost all other organisms. Typical Pseudomonas aeruginosa colonies appear greenish in color



Micro Organism Reactions

pH: 7.00 - 7.40

Organism	Result, Color of Colony
Pseudomonas Aeruginosa	Growth
Escherichia coli	Inhibited
Staphylococcus Aureus	Inhibited

Code: 1024

Code: 1027

Pseudomonas aeruginosa Growth with Green / Blue Colonies

CHOCOLATE AGAR

Chocolate Agar is a non –selective highly enriched medium for the growth of Haemophilus and Neisseria species. Defibrinated Sheep Blood (X factor) together with Vit - X (V factor) were added to supply all the required nutrients for growth of these fastidious organisms.

Micro Organism Reactions

pH: 7.00 -7.40

Organism	Result, Color of Colony
Neisseria gonorrhoeae	Growth – Gray, Mucoid
Haemophilus influenzae	Growth – Gray, Round
Haemophilus para – influenzae	Growth - Gray , Round

Streptococci pneumoniae Small grey colonies with a haemolysis

CHOCOLATE BACITRACIN AGAR

Code: 1029

Code: 1028

A selective medium for the isolation of Haemophilus species from Specimens of mixed flora. Bacitracin inhibits the growth of most gram positive and gram negative bacteria.



Micro Organism Reactions
 pH: 6.80 – 7.20

Organism	Result, Color of Colony
Haemophilus influenzae	Growth - Gray, Round
Haemophilus para – influenzae	Growth - Gray, Round
Staphylococcus aureus	No growth
Streptococcus pyogenes	No growth

CHOCOLATE ISOSENSITEST AGAR

A highly nutritious sensitivity test medium recommended for antibiotic sensitivity testing of Haemophilus and Neisseria species.



• Micro Organism Reactions

pH: 7.20 - 7.60

Organism	Result, Color of Colony
Neisseria gonorrhoeae	Growth - Gray, Mucoid
Haemophilus influenzae	Growth - Gray, Round
Haemophilus para – influenzae	Growth - Gray, Round

CLED MEDIUM Code: 1030

Cystine Lactose Electrolyte Deficient medium is recommended for use in the investigation of urinary pathogens. Supporting the growth of most urinary pathogens, it gives good differential characterization on the basis of lactose fermentation. The fact that is electrolyte deficient means that the swarming of Proteus species is prevented



 Micro Organism Reactions pH: 7.10 – 7.50

1	
Organism	Result, Color of Colony
Escherichia Coli	Growth Large Yellow, Colony
Klebsiela Pneumoniae	Growth Yellow Mucoid colony
Proteus Mirabilis	Growth Blue Colony
Enterococcus faecalis	Growth Yellow Colony
Staphylococcus Aureus	Growth Small Yellow Colony

Code: 1034

CLED MEDIUM W/ ANDREADES

CLED Agar with andrade's indicator has a composition similar to CLED Agar, but with Andrade's indicator added. The bromthymol blue indicator is replaced with Andrades indicator (acid fuchsin) to achieve better differentiation between lactose fermenters and nonfermenters.

It is based on the principle of lactose fermentation, lowering the pH of the medium with the acid production.

Casein peptone, Beef extract and Gelatin peptone provide essential nutrients for growth: nitrogen, vitamins, minerals and amino acids. Lactose is the fermentable carbohydrate, providing carbon and energy; L-Cysteine is a growth supplement for cysteine-dependent coliforms. Bromothymol blue and Andrade's indicator are pH indicators.

CLED with Andrade's Indicator should not be incubated longer than 24 hours. Lactose fermenters, if present, may turn the entire plate pink after this time, masking the presence of nonfermenters.

• Micro Organism Reactions pH 7.5 ± 0.2 at 25°C

Organism	Result, Color of Colony
Proteus mirabilis	Blue-green translucent colonies
Escherichia coli	Bright pink semi translucent colonies with surrounding pink halo
Staphilococcus aureus	Smooth, entire, opaque; bright golden yellow colonies

CLOSTRIDIUM DIFFICILE AGAR

Code: 1032

CI. Difficile has been demonstrated as a major cause of antibiotic associated diarrhea and Pseudo membranous colitis in man. This medium is designed for the selective isolation and enumeration of CI. Difficile from faecal specimens. The selective agents employed Cefoxitin and D-Cycloserine inhibit the growth of most Enterrobacteriaceae, Streptococci, Bacteroides and other Clostridial species.

• Micro Organism Reactions Escherichia coli Large yellow colonies pH: 7.20 – 7.60



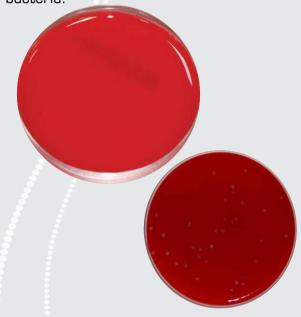


Clostridium difficile Grey opaque flat colonies. Distinctive smell. Yellow fluorescence under UV light

Organism	Result, Color of Colony
Clostridium Difficile	Growth – Gray, Round
Clostridium Perfringens	Inhibited
Escherichia Coli	Inhibited
Enterococcus Faecalis	Inhibited

COLUMBIA HORSE BLOOD AGAR

A high quality non-selective, general purpose medium containing an enriched peptone mixture particularly adapted for the cultivation of nutritionally fastidious organisms. Supplemented with 6% defibrinated horse blood, typical alpha and beta haemolysis may be observed by haemolytic bacteria.



 Micro Organism Reactions pH: 7.10 – 7.50

Organism	Result, Color of Colony
Streptococcus Pneumoniae	Growth – Gray , Alpha Haemolytic
Streptococcus Pyogenes	Growth – Gray , Beta Haemolytic
Staphylococcus Aureus	Growth – White, Round
Bacteroides Fragilis	Growth – Gray, Round
Clostridium Perfringens	Growth – Beta Hemolytic

Code: 1033

Code: 1036

Bacteroides fragilis Small grey colonies

COLUMBIA CNA AGAR

Columbia Colistin Nalidixic Acid Blood Agar is designed for the selective isolation of Streptococci, Staphylococci and other gram positive bacteria from mixed cultures. Proteus, Pseudomonas and other coliform bacilli are almost completely inhibited.



• Micro Organism Reactions

pH: 7.10 - 7.50

Organism	Result, Color of Colony
Streptococcus Pneumoniae	Growth Gray , Alpha Haemolytic
Streptococcus Pyogenes	Growth Gray , Beta Haemolytic
Staphylococcus Aureus	Growth White, Round
Proteus Mirabilis	No Growth
Escherichia Coli	No Growth
Pseudomonas Aeruginosa	No Growth

M O N O P L A T E S

CORN MEAL AGAR

Corn Meal Agar is a general —purpose media used for the cultivation of fungi and the demonstration of chlamydospore production.

Candida albicans is the etiological agent in candidiasis, which can range from a mild to severe infection of skin, nails, and mucous membranes. Several media formulations have been developed that will promote morphological or physiological characteristics in Candida albicans, and differentiate it from other Candida spp. and other genera. One of the most important differential characteristics of C. albicans is the ability to form chlamydospores on certain media.

Corn Meal Agar stimulates sporulation of C. albicans, and is useful in suppressing certain other fungal growth. Chlamydospore production is an important diagnostic characteristic used in the identification of C. albicans.

• Micro Organism Reactions

pH: 6.0 ± 0.2 at 25° C

Organism	Result, Color of Colony
Candida albicans	positive
Saccharomyces cerevisiae	negative





Candida Albicans

Cultures on Corn Meal Agar should be examined for chlamydospore production after 2 to 7 days of incubation at $25 \pm 2^{\circ}$ C. Note: Some Candida spp. may take up to 14 days to produce chlamydospores.

D.C.L.S. AGAR

Code: 1040

D.S.L.S agar is a moderately selective culture medium for the isolation of Salmonella and Shigella from faecal specimens. The incorporation of two sugars permits the formation of red colonies by organisms that rapidly ferment either sucrose or lactose, or both; e.g., Proteus vulgaris, as well as typical coliforms. This permits the more accurate selection of members of the genera Shigella and Salmonella, which form colorless or nearly colourless colonies on DCLS Agar



• Micro Organism Reactions

pH: 7.00 - 7.40

Organism	Result, Color of Colony
Salmonella Typhimurium	Growth, colorless, Pink
Escherichia Coli	P. Inhibited, pink
Enterrococcus Faecalis	Inhibited

DNASE AGAR

Code: 1043

A recommended medium for the detection of Deoxyribonuclease activity in bacteria. By flooding with 1N HCl, a clear zone around the colony indicates that it is positive for Dnase



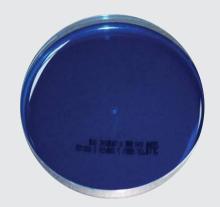
Micro Organism Reactions
 pH:7.10 – 7.50

Organism	Result, Color of Colony
Staphylococcus Aureus	(+) Dnase
Staphylococcus epidermidis	(-) Dnase
Stretococcus Pyogens	(+) Dnase

DNASE AGAR WITH TOLUIDINE BLUE

Code: 1042

A recommended medium for the detection of Deoxyribonuclease activity in bacteria. In the presence of Toluidine blue a pink zone will form around Dnase producing colonies such as Staphylococcus Aureus and Serratia Marcescens. The incorporation of toluidine blue in the formulation also avoids the process of flooding the plate with HCl to identify Dnase producing colonies.



• Micro Organism Reactions

pH: 7.1 – 7.50

Organism	Result, Color of Colony
Staphylococcus aureus	(+) Dnase, pink (weak reaction)
Staphylococcus epidermidis	(-) Dnase
Streptococcus Pyogenes	(+) Dnase, pink

DEOXYCHOLATE CITRATE AGAR

Code: 1039

A highly selective differential medium for the isolation of enteric pathogens, particularly Salmonella and Shigella species. The incorporation of sodium deoxycholate and sodium citrate suppresses the growth of gram positive Cocci, Proteus species and coliforms.



• Micro Organism Reactions

pH: 7.30 - 7.70

Organism	Result, Color of Colony
Escherichia coli	Partially Inhibited, Pink to Red
Salmonella Typhimurium	Growth, Black colony
Enterococcus faecalis	Inhibited

E.Coli

DST AGAR Code: 1041

Diagnostic Sensitivity Test Agar is recommended for diagnostic as well as testing the susceptibility of organisms to antibiotics and chemotherapeutic agents, such as Sulphonamides. Aneurine acts as a vitamin source. Addition of the bases adenine, guanine, uracil and xanthine improve the antibiotic testing performance of the medium.

EDWARDS MEDIUM

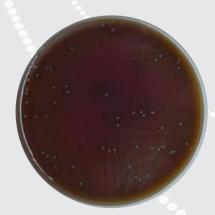
This is a medium for the selective isolation of streptococci, particularly Streptococcus agalactiae, involved in bovine mastitis. The medium is enriched by the addition of 7% Sheep Blood and made selective by the inclusion of Crystal Violet and Thallous Sulphate. Aesculin is also present and assists in the differentiation of Streptococcus agalactiae, which give rise to blue colonies, from Aesculin positive Group D streptococci which produce black colonies.



• Micro Organism Reactions

pH: 7.20 - 7.60

Organism	Result, Color of Colony
S. Agalactiae	Good; Blue colonies
E. Faecalis	Good; gray round
S. Epidermis	Inhibited
E. Coli	Inhibited



Enterococcus faecalis Black colonies

GARDNERELLA SELECTIVE AGAR

Code: 1050

Code: 1046

A selective medium for the isolation of Gardnerella Vaginalis from patients with non – specific vaginitis. The three antimicrobial agents in the NAN supplement prevents the growth of contaminating organisms.



Micro Organism Reactions
 pH: 7.10 – 7.50

Organism	Result, Color of Colony
Gardnerella Vaginalis	Growth, tiny beta haemolytic
Escherichia coli	No Growth
Proteus mirabilis	No Growth
Staphylococcus aureus	No Growth
Candida albicans	No Growth

GC AGAR BASE 1% DGS

GC Agar is used with hemoglobin and enrichment for the isolation and cultivation of Neisseria gonorrhoeae and other fastidious organisms

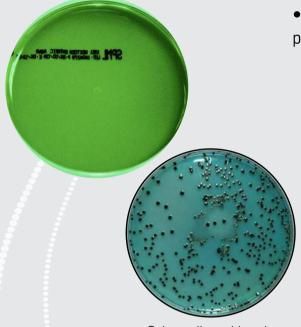
• Micro Organism Reactions

pH: 7.00 – 7.40

Organism	Result, Color of Colony
N. Gonorrhoeae	Good; gray colony
H. Influenzae	Good; gray colony

HEKTOEN ENTERIC AGAR

A differential selective medium for the isolation of Salmonella and Shigella species from pathological specimens. Lactose, Sucrose and Salicin are added to differentiate, Salmonella appear blue green with black center, while Shigella appear as blue green colonies



• Micro Organism Reactions pH: 7.30 – 7.70

Organism	Result, Color of Colony
Escherichia coli	Partially Inhibited – Salmon pink
Salmonella typhimurium	Growth – Blue Green, Black center
Shigella Flexneri	Growth –Blue Green

Code: 1051

Code: 1052

Salmonella typhimurium Blue/green colonies with black centre

HOYLE MEDIUM

A highly selective medium for the isolation and differentiation of Corynebacterium types. The addition of Potassium Tellurite renders the medium inhibitory to most other organisms



• Micro Organism Reactions PH: 7.60 – 8.00

Organism	Result, Color of Colony
Corynebacterium diphtheria	Growth –Gray, Black
Staphylococcus aureus	Inhibited
Escherichia coli	Inhibited

ISOSENSITEST AGAR

Code: 1053

Developed specifically for antibiotic sensitivity testing. Isosensitest agar supports the growth of most bacteria without further supplementation.



• Micro Organism Reactions pH:7.20 - 7.60

Organism	Result, Color of Colony
Escherichia coli	Growth, Cream colony
Staphylococcus Aureus	Growth ,White Round
Pseudomonas Aeruginosa	Growth ,Pale Green

K-V LAKED BLOOD AGAR

Kanamycin - Vancomycin Laked Blood Agar is designed for the selective isolation and identification of Gram Negative Anaerobes. The addition of Laked Sheep Blood induces cultures of Bacteroides Melanogenicus to fluoresce under U V light



• Micro Organism Reactions

pH: 7.30 - 7.70

Organism	Result, Color of Colony
Bacteroides Melanogenicus	Growth
Bacterodes Fragilis	Growth
Clostridium Perfringens	No Growth
Staphylococcus aureus	No Growth

LEGIONELLA BCYE AGAR

Medium used for the isolation of Legionella from Clinical and Environmental specimens.



• Micro Organism Reactions

pH: 6.80 - 7.00

Organism	Result, Color of Colony
Legionella pneumophila	Growth, Yellow- Green
Staphylococcus epidermidis	Inhibited

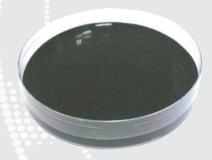
Code: 1061

Code: 1065

Code: 1079

LEGIONELLA GVPC AGAR

Medium used for the isolation of Legionella from Clinical and Environmental specimens with the addition of Glycin, Vancomycin, and polymixin will inhibit gram positive and negative bacterial growth, Cycloheximide suppress the growth of fungi.



• Micro Organism Reactions pH:6.80 – 7.00

Organism	Result, Color of Colony
Legionella spp.	Growth, Gray blue
Escherichia Coli	Inbibited

LETHEEN AGAR

Letheen Agar, Modified and Letheen Broth, Modified are used for the microbiological testing of cosmetics.

• Micro Organism Reactions

pH: 6.80 - 7.20

Organism	Result, Color of Colony
Escherichia Coli	Good
Staphylococcus Aureus	Good

Code: 1055

Code: 1056

LEVINE EMB AGAR

A versatile medium primarily designed for the differentiation of enteric gram negative bacilli. Differentiation is on the basis of lactose fermentation with corresponding absorption of eosin and methylene blue. E. coli colonies exhibit a green metallic sheen by reflected light

> and dark purple centers by transmitted light. Enterobacter aerogens don't usually exhibit the metallic sheen, but exhibit dark brown centers by transmitted light. Non - Lactose fermenting colonies are translucent and colorless.

 Micro Organism Reactions pH: 6.60 - 7.00



Escherichia Coli

LISTERIA SELECTIVE AGAR

A selective medium for the isolation of Listeria. Columbia agar base is the nutrient base to which selective inhibitors are added. Lithium chloride is used to inhibit enterococci and acriflavine inhibits some Gram-negative and Gram-positive organisms. Further selective agents added are

> colistin, fosfomycin, cefotetan and cyclohexamide. Aesculin is included as a differential indicator. Listeria monocytogenes hydrolyses aesculin to form aesculutin which reacts with the iron salt to give a black precipitate around the colonies.

Listeria Monocytogenes

 Micro Organism Reactions pH: 6.60 - 7.00

Organism	Result, Color of Colony
	Good; black zones
Monocytogenes	around the colony
S. Aureus	None -Poor

mENDO AGAR Code: 1062

The American Public Health Association specifies using m Endo Agar LES in the standard total coliform membrane filtration procedure for testing drinking water and bottled water. The coliform are bacteria that produce a red colony with a metallic sheen within 24 hours incubation at 35°C on an Endo-type medium. Lactose-fermenting bacteria produce acetaldehyde that reacts with the sodium sulphite and fuchsin to form red colonies. The development of a metallic sheen occurs when the organism produces aldehydes with the rapid fermentation of lactose. If the inoculum is too heavy, the sheen will be suppressed. Lactose-nonfermenting bacteria form clear, colorless colonies.



• Micro Organism Reactions pH:7.00 – 7.40

Organism	Result, Color of Colony
Salmonella typhimurium	Growth, Pink
Staphylococcus Aureus	Inhibited
Escherichia Coli	Growth, red with sheen

Code: 1058

MacCONKEY AGAR

A differential medium used in routine analysis of urine. Lactose fermenting bacteria are differentiated from non – lactose fermenting bacteria by their pink colonies and the absence of salt in the formulation prevents the swarming of

Proteus species



Organism	Result, Color of Colony
Salmonella Typhimurium	Growth Colorless
Shigella Sonnei	Growth Colorless
Escherichia Coli	Growth Pink to Red
Proteus Mirabilis	Growth Colorless
Enterococcus Faecalis	Growth Pink to Red
Staphylococcus Aureus	Growth Pink to Red



Growth of Enterococcus Faecalis

MacCONKEY AGAR W/SALT & CRYSTAL VIOLET Code: 1057

A selective differential medium for the isolation And enumeration of enteric gram negative bacilli as with MacConkey Agar. Differentiation is based on lactose fermentation. However with the addition of salt to the formulation, proteus will swarm and the presence of crystal violet inhibits the growth of most gram positive organisms.

• Micro Organism Reactions

pH: 6.90 - 7.30

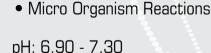


Organism	Result, Color of Colony
Salmonella Typhimurium	Growth Colorless
Shigella sonnei	Growth Colorless
Escherichia Coli	Growth Pink to Red
Proteus Mirabilis	Growth Colorless, swarming
Enterococcus Faecalis	No Growth
Staphylococcus Aureus	No Growth

SORBITOL MacCONKEY AGAR

A selective and differential medium for the detection of pathogenic E.Coli 0157:H7.

This organism has recently been recognized as a cause of heamorrhagic colitis and can be differentiated from non-pathogenic strains of E. coli by its ability to ferment sorbitol. Sorbitol fermenting organisms produce pink colonies while non-fermenting ones produce opaque colorless colonies.





Organism Result, Color of Colony

Escherichia Coli Growth – Pink to Red

E. Coli 0157 Growth – Colorless

Sraphylococcus Aureus No Growth

Enterococcus Faecalis No Growth

MANNITOL SALT AGAR

Code: 1060

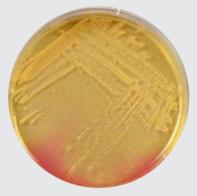
A selective medium recommended for the presumptive identification of pathogenic Staphylococci. The high salt concentration inhibits the growth of most other bacteria with the exception of halophilic species. Presumptive identification of coagulase positive Staphylococci is

made on the basis of their ability to ferment Mannitol, producing colonies surrounded by a bright yellow zone. Non-pathogenic species produce

colonies with reddish/Purple zone.

• Micro Organism Reactions pH: 7.30 - 7.70

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Organism	Result, Color of Colony
Staphylococcus Aureus	Growth Yellow colonies
Staphylococcus Epidermidis	Fair Growth Red Colonies
Escherichia Coli	No Growth



Staphylococcus Aureus Growing on Mannitol Salt Agar

Code: 1064

MANNITOL SALT AGAR WITH OXACILLIN

Mannitol Salt Agar (MSA) is used as a selective, differential media for pathogenic staphylococci. Oxacillin has been added for selective isolation of methicillin-resistant strains. Oxacillin is used instead of methicillin due to its greater stability. This plate may be used to screen environmental and clinical specimens



Micro Organism Reactions

pH: 7.30-7.70

Organism	Result, Color of Colony
MRSA	Growth, small yellow
Staphylococcus Aureus	Inhibited
Staphylococcus Epidermidis	Inhibited

M O N O P L A T E S

MUELLER HINTON AGAR WITH 4% SALT & OXACILLIN Code: 1070

Used in the detection of Methicillin Resistant strains of Staphylococcus (MRSA) oxacillin is added to the medium to suppress the growth of methicillin sensitive strains while salt at a final concentration of 4% suppresses the growth of non-salt tolerant organisms.



• Micro Organism Reactions pH: 7.10-7.50

Organism	Result, Color of Colony
MRSA	Growth Cream/White
Staphylococcus Aureus	No Growth
Staphylococcus Epidermis	No Growth

MUELLER HINTON AGAR W/2% NACL

The need to add NaCl to agar media to ensure accuracy of results when testing staphylococci with oxacillin was investigated.

• Micro Organism Reactions

pH: 7.10 - 7.50

Organism	Result, Color of Colony
MRSA (ATCC)	Good; white/cream colony
S. Aureus	Good; white colony
S. Epidermis	Good; white colony

MIDDLEBROOK 7H11 AGAR

These media are used in qualitative procedures for isolation and cultivation of mycobacteria, especially Mycobacterium tuberculosis, from clinical and nonclinical specimens.

• Micro Organism Reactions

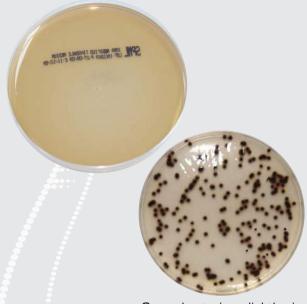
pH: 6.40 - 6.80

Organism	Result, Color of Colony
Mycobacterium Smegmitis	Good
E. Coli	Inhibited

Code: 1083

TINSDALE AGAR Code: 1099

A medium used for the isolation and identification of corynebacterium diphtheria



Corynebacterium diphtheriae Growth with black colonies

• Micro Organism Reactions

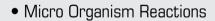
pH: 7.20 - 7.60

Organism	Result, Color of Colony
Corynebacterium ulcerans	Growth, Black with halo
Klebsiella pneumoniae	Inhibited
Streptococcus Pyogenes	Fair Growth Brown to black

Code: 1066

MUELLER HINTON AGAR

An anti-microbial susceptibility test medium for use in internationally recognized standard procedures. Mueller Hinton Agar is the recommended medium for sensitivity testing by the CLSI.



pH: 7.20 - 7.40



Organism	Result, Color of Colony
Escherichia Coli	Growth Cream Zone diameters within published specification.
Staphylococcus Aureus	Growth White Zone diameters within published specification
Pseudomonas Aeruginosa	Growth Plate Green Zone diameters within published specification

MUELLER HINTON AGAR WITH 5% SHEEP BLOOD

Code: 1069

Code: 1067

Enriched with defibrinated sheep blood this medium is ideal sensitivity testing of Streptococci species and other haemolytic bacteria



Micro Organism Reactions
 pH: 7.10 – 7.50

Organism	Result, Color of Colony
Staphylococcus Aureus	Growth, White/Cream zone diameter within published specification
Pseudomonas Aeruginosa	Growth, Gray zone diameter within published specification
Enterococcus faecalis	Growth, Gray zone diameter within published specification
Escherichia coli	Growth, Gray zone diameter within published specification

MUELLER HINTON CHOCOLATE AGAR

Supplemented with chocolated sheep blood and Vit-X, this highly nutritious medium is suitable for sensitivity testing of Haemophilus Neisseria and other fastidious species.



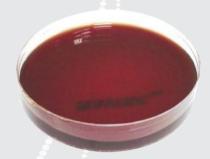
• Micro Organism Reactions

pH: 7.10 - 7.50

Organism	Result, Color of Colony
Haemophilus Influenzae	Growth Gray zone diameter within published specification.
Neisseria Gonorrhoeae	Growth, Gray. zone diameter within published specification

MUELLER HINTON WITH LAKED SHEEP BLOOD

Enriched with laked sheep blood this is an ideal medium for sensitivity testing of nutritionally fastidious bacteria.



• Micro Organism Reactions pH: 7.10 – 7.50

Organism	Result, Color of Colony
Escherichia Coli	Growth Gray, zone diameter within published specification
Staphylococcus Aureus	Growth Cream/White, zone diameter within published specification

Code: 1068

Code: 1072

MYC OLOGICAL AGAR WITH C&C

A selective medium for the cultivation and isolation of yeasts and fungi specimens containing mixed microbial flora. Most bacteria are inhibited by the two selective agents; Cycloheximide and Chloramphenicol.



• Micro Organism Reactions

pH: 6.30 -6-70

Organism	Result, Color of Colony
Escherichia Coli	No Growth
Staphylococcus Aureus	No Growth
Candida Albicans	Growth off White

Code: 1073

Code: 1074

MYCOPLASMA SELECTIVE AGAR

An enriched medium which will support the growth of Mycoplasma species.



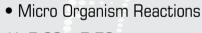
• Micro Organism Reactions

pH: 7.60 - 8.00

Organism	Result, Color of Colony
Mycoplasma species	Growth
Candida Albicans	No Growth
Staphylococcus Aureus	No Growth
Escherichia Coli	No Growth

NEOMYCIN ANAEROBE BLOOD AGAR

A selective medium enriched with K 1 and Hemin to enhance the growth of anaerobes. The action of Neomycin inhibits the growth of coli forms and staphylococci.



pH: 7.30 – 7.70



Organism	Result, Color of Colony
Clostridium Perfringens	Growth Gray, Beta Hemolytic
Bacteroides Fragilis	Growth Gray, white round
Escherichia Coli	No Growth
Staphylococcus Aureus	No Growth

NUTRIENT AGAR Code: 1075

A general purpose medium for the cultivation, enumeration and maintenance of non-fastidious organisms.



• Micro Organism Reactions

PH: 7.20 - 7.60

Organism	Result, Color of Colony
Escherichia Coli	Growth, cream
Staphylococcus Aureus	Growth, white
Streptococcus Pyogenes	Growth, colorless

Code: 1091

PHENYLETHYL ALCOHOL (PEA) AGAR

PEA is recommended for the selective isolation of gram – positive cocci from clinical specimens or from mixed population of gram – negative and gram–positive flora. Phenylethanol agar with sheep blood is a selective media developed by Brewer and Lilley. The addition of phenylethanol to the basal nutritive media permits the growth of gram – positive organisms (particularly cocci) while inhibiting most gram–negative organisms, especially the swarming of proteus species. Most gram negative organisms will form visible colonies, but appear smaller and

fewer in number than the gram-positive colonies, allowing for isolation and subculture. The media is not recommended for the determination

of hemolytic reaction, as atypical reactions may occur.

PEA - Phenylethyl Alcohol Agar - selective

This culture medium allows the growth of gram positive and inhibits the growth of gram negative. Phenylethyl alcohol interferes with DNA synthesis of gram negative species.

• Micro Organism Reactions

PH: 7.10 - 7.50



Staphylococcus Aureus

Result, Color of Colony
Suppressed to inhibited
Growth
Markedly Inhibited
Growth
Growth
Growth

PLATE COUNT AGAR

Code: 1076

Code: 1038

A medium used for the enumeration of viable organisms in milk and dairy product.



• Micro Organism Reactions

PH: 6.80 -7.20

Organism	Result, Color of Colony
Staphylococcus Aureus	Growth – White Colony
Escherichia Coli	Growth – Cream Colony

POTATO DEXTROSE AGAR

Potato Dextrose Agar is used for the cultivation of fungi. Conforms to Harmonized Requirements. Potato Dextrose Agar (PDA) is a general purpose medium for yeasts and molds that can be supplemented with acid or antibiotics to inhibit bacterial growth. It is recommended for plate count methods for foods, dairy products and testing cosmetics. PDA can be used for growing clinically significant yeast and molds.



Aspergillus niger colony

• Micro Organism Reactions

pH: 7.10 - 7.50

Organism	Result, Color of Colony
Aspergillus niger	Growth
Candida albicans	Growth
Trichophyton mentagrophytes	Growth

PRESTON CAMPY AGAR

Preston campy agar is used for the selective isolation of Campylobacter jejuni and Campylobacter coli. The formula, with the addition of the Preston Supplement, was developed to isolate Campylobacter spp. from human, animal, and environmental specimens. The Preston formulation demonstrated improved recovery and selectivity of Campylobacter species.

Enzymatic Digest of Animal Tissue and Enzymatic Digest of Casein are the nitrogen and vitamin sources in this medium. Sodium Chloride provides the osmotic environment, Agar is the solidifying agent. Antibiotics added to suppress normal enteric flora, and enhance the growth of Campylobacter species. The addition of 5% lysed horse blood provides essential growth factors. Prepared medium with 5% lysed horse blood is red, clear to trace hazy.

• Micro Organism Reactions

PH: 7.20 - 7.60

Organism	Result, Color of Colony
Campylobacter jejuni	Growth, white colonies, round to irregular with smooth edges.
Enterococcus faecalis	inhibited
Proteus mirabilis	inhibited

PSEUDOMONAS AGAR

Pseudomonas Isolation Agar is used with added glycerol in isolating Pseudomonas and differentiating Pseudomonas aeruginosa from other pseudomonads based on pigment formation.



Micro Organism Reactions

pH: 6.80 - 7.20

Organism	Result, Color of Colony
P. Aeruginosa	Good; Cream colonies with green pigmentation
E. Coli	Inhibited

Code: 1022

Code: 1077

Pseudomonas aeruginosa on Pseudomonas Agar.

R2A Code: 1088

This medium is used for the enumeration and cultivation of bacteria treated potable water using longer incubation periods. It was demonstrated that using this medium and incubating for longer at lower temperatures enhanced the recovery of stressed and chlorine damaged bacteria from treated waters resulting in higher, more realistic bacterial counts.



• Micro Organism Reactions

pH: 7.00 - 7.40

Organism	Result, Color of Colony
B. Subtilis	Growth
Staphylecoccus Aureus	Good: White colonies
Escherichia Coli	Good: Cream colonies

SABDEX BHI AGAR

Sabouraud BHI Agar is used for the cultivation of fungi. Sabouraud Dextrose Agar as a general purpose medium for the recovery of dermatophytes. Brain Heart Infusion is a highly nutritious medium used for cultivating a variety of fastidious organisms and medically important fungi. Sabouraud BHI Agar, developed by Gorman, combines ingredients of Sabouraud Dextrose Agar and Brain Heart Infusion. This medium is particularly useful for maximum recovery of Blastomyces dermatitidis and Histoplasma capsulatum from body tissues and fluids, and as a primary recovery medium for saprophytic and pathogenic fungi.

• Micro Organism Reactions

pH: 6.80 – 7.20

Organism	Result, Color of Colony
Candida Albicans	Good; white round colony
S. Aureus	Good; white colony
Escherichia Coli	Good: cream colony

SABOURAUD DEXTROSE AGAR

Recommended for the cultivation and isolation of yeasts and fungi, this medium has low PH value of 5.6 which enhances the growth of yeasts and fungi but inhibits the growth of most bacteria.



• Micro Organism Reactions

pH: 5.40 - 5.80

Organism	Result, Color of Colony
Candida Albicans	Growth off white, round
Escherichia Coli	Growth, cream
Staphylococcus Aureus	No Growth

Code: 1081

Code: 1082

SABOURAUD DEX. W/CHLORAMPHENICOL

Sabouraud Dextrose Agar W/ Chloramphenicol is used for the selective isolation of fungi.



• Micro Organism Reactions

pH: 5.40 - 5.80

Organism	Result, Color of Colony
Candida Albican	Good; Off white round colony
Staphylococcus Aureus	Inhibited
Escherichia Coli	Inhibited

Code: 1084

Code: 1009

SALMONELLA SHIGELLA AGAR

A selective and differential medium for isolation of Salmonella and Shigella species from pathological

specimens and foodstuffs. Coliforms and gram positive cocci are suppressed by the action of bile salts and brilliant green while differentiation is based on the fermentation of lactose with the corresponding absorption of nature red.



 Micro Organism Reactions pH: 6.80 – 7.20

Organism	Result, Color of Colony
Salmonella Typhimurium	Growth – Colorless, Black center
Shigella sonnei	Growth – Colorless
Escherichia Coli	Inhibited – Pink
Proteus Mirabilis	Growth – Colorless
Enterococcus Faecalis	No Growth

Salmonella typhimurium Yellow colonies with black centre

SHEEP BLOOD AGAR

A non selective, highly nutritious general purpose medium. For the growth of nutritionally fastidious organisms. The additional of defibrinated Sheep Blood at a concentration of 5% give typical alpha &beta haemolysis by Streptococci and other haemolytic organism





• Micro Organism Reactions

pH: 7.10 - 7.50

Organism	Result, Color of Colony
Streptococcus Pneumoniea	Growth - Gray, Flat, Alpha Haemolytic
Streptococcus Pyogens	Growth – Gray, Round, Beta Haemolytic
Straphylococcus Aureus	Growth – White Pound
Bacteroides fragilis	Growth – Gray, Round
Clostridium Perfringens	Growth – Gray, Flat, Beta Haemolytic

Positive Staphylococcus growth

SHEEP BLOOD AGAR # 2

Similar and with the same purpose as SHEEP BLOOD AGAR, this medium uses a based medium specifically formulated for preparation of blood agars. The formulation is

designed to give optimal haemolytic reactions



Organism	Result, Color of Colony
Streptococcus Pneumoniea	Growth - Gray, Flat, Alpha Haemolytic
Streptococcus Pyogenes	Growth – Gray, Round, Beta Haemolytic
Sraphylococcus Aureus	Growth – White, Round

Code: 1008

Positive Streptococcus culture.



AGAR

is used for cultivating micrographisms being tested for starch hydrolysis. Rec

Starch Agar is used for cultivating microorganisms being tested for starch hydrolysis. Beef extract provides the nitrogen, vitamins, carbon and amino acids in Starch Agar. Starch reacts with Gram Iodine to give a blue colour. Organisms

hydrolyzing starch through amylase Production will produce a clearing around the isolate while the remaining medium is blue. Agar is the solidifying agent.

• Micro Organism Reactions

PH: 7.30 - 7.70

-	Organism	Starch Hydrolisis Test
	Bacillus Subtilis	+
	E. Coli	
	Staphylococcus Aureus	-
ſ	Streptococcus Pyogenes	

The starch was not hydrolized by the Escherichia coli on the left. The starch reacts with the iodine producing the dark color.

Flood the surface of a 48hrs culture on starch agar with gram iodine. Starch hydrolysis (+) is indicated by a colorless zone surrounding colonies. A blue or purplezone indicates that starch has not been hydrolyzed (-)

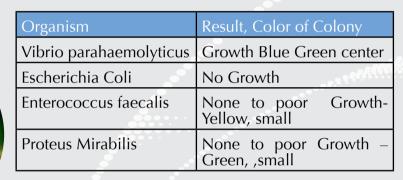
TCBS MEDIUM Code: 1090

A differential and highly selective medium for the isolation of Vibrio species, including Vibrio cholera and Vibrio parahaemolyticus. Most enterobacteriacae are suppressed

for at least 24 hours. Slight growth of proteus and Streptococci species may occur but these can be easily distinguished from Vibrio species.

• Micro Organism Reactions

pH: 8.4 0-8.80



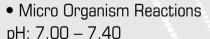
Vibrio parahaemolyticus on TCBS agar

THAYER MARTIN AGAR

A highly selective medium for the cultivation and isolation of Neisseria Gonorrhea and Neisseria Meningitidis, particularly from specimens of mixed flora. The addition of four antimicrobial agents

prevents the growth of any contamination which may be present in the





Organism	Result, Color of Colony
Neisseria Gonorrhoeae	Growth – Gray, Mucoid
Sraphylococcus Aureus	Inhibited
Escherichia Coli	Inhibited
Candida Albicans	Partial to Complete Inhibition - Gray Colony

TRYPTIC SOY AGAR

Tryptic Soy Agar is used for isolating and cultivating fastidious microorganisms and, with blood, in determining hemolytic reactions. Tryptic soy agar (TSA) inoculated with Staphylococcus aureus,

Staphylococcus epidermidis, and Escherichia coli demonstrating growth of all three organisms.

TSA is a general purpose medium that will allow for the growth of all three organisms.



• Micro Organism Reactions pH: 7.10 -7.50



Code: 1093

Code: 1110

TSA inoculated with Staphylococcus aureus, Staphylococcus epidermidis, and Escherichia coli.

Organism	Result, Color of Colony
S. Pyogenes	Moderate; colorless colony
S. Aureus	Good; white colony
E. Coli	Good; cream colony

VIOLET RED BILE AGAR

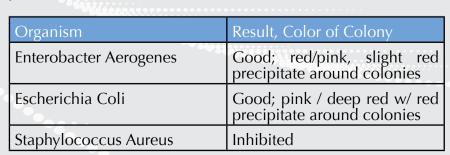
Violet Red Bile Agar is used for enumerating coliform organisms in dairy products.

The coliform group of bacteria includes aerobic and facultatively anaerobic gram-negative non-sporeforming bacilli thatferment lactose and form acid and gas at 35°C within 48 hours. Members of the Enterobacteriaceae comprise the majority ofthe group but other lactose fermenting organisms may also be included. Procedures

to detect, enumerate and presumptively identify coliforms are used in testing foods and dairy products.

• Micro Organism Reactions

pH: 7.2 - 7.6



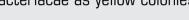


Escherichia coli

XLD MEDIUM Code: 1096

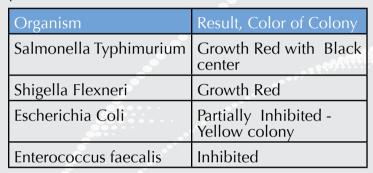
Xylose Lysine Deoxycholate Medium is a selective and differential medium for the isolation and presumptive identification of Salmonella Shigella species. Differentiation is

based on Xylose fermentation, Lysine DeCarboxylation and production of Hydrogen Sulphide. Salmonella species generally appear as red colonies with black centers, Shigella as red colonies without black centers and other Enterobacteriacae as vellow colonies.



• Micro Organism Reactions

pH: 7.20 - 7.60



Salmonella spp. after 24 hours growth on XLD medium.

YEAST & MOULD AGAR

Yeast and mould agar is recommended for the isolation and maintenance of yeast and moulds. Detection and enumeration of yeasts in the presence of moulds may be made easier by using a combined anaerobic/aerobic incubation procedure. Cultures are initially incubated at 25°C for 3 days under anaerobic conditions and then for a further two days aerobically. Development of mould colonies is impeded during the anaerobic phase of incubation. Yeast colonies may be very small immediately following anaerobic incubation but will increase in size in air. Mould growth may become completely unrestricted after 3 days in air. Dimorphic moulds may form yeast-like colonies during anaerobic incubation.

Micro Organism Reactions
 pH 6.00 ± 6.40

Organism	Result, Color of Colony
Aspergillus Niger	Good growth; white mycelium, black spores
Candida Albicans	Good growth; cream coloured colonies
S. Aureus	Good growth; straw coloured colonies

YERSINA SELECTIVE AGAR

Code: 1098

A highly selective medium recommended for the isolation and enumeration of Y. Enterocolitica from clinical and non-clinical sources. Typical colonies of Y. Enterocolitica develop as dark red "bulls eye" colonies surrounded by a lighter pinkish border.

• Micro Organism Reactions

pH: 7.2 - 7.6

Organism	Result, Color of Colony
Yersinia Enterocolitica	Growth dark pink /red center
Escherichia Coli	Inhibited
Proteus Mirabilis	Inhibited
Enterococcus faecalis	Inhibited



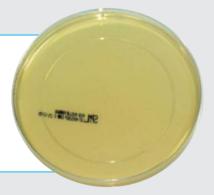


Yersinia enterocolitica Growth & Red

OMONO PLATES 150 x15mm, 66ml

Mueller Hinton Agar Code: 4010

An anti-microbial susceptibility test medium for use in internationally recognized standard procedures. Mueller Hinton Agar is the recommended medium for sensitivity testing by the CLSI/NCCLS



SPML

Mueller Hinton 5% Blood Agar Code: 4020

Enriched with defibrinated sheep blood this medium is ideal sensitivity testing of Streptococci species and other haemolytic bacteria.

Mueller Hinton Chocolate Agar Code: 4030

Supplemented with Chocolate sheep blood and Vit-X, this highly nutritious medium is suitable for sensitivity testing of Haemophilus Neisseria and other fastidious species.



Haemophilus Test Medium Code: 4040

This is the medium of choice by CLSI/NCCLS for use in the antibiotic sensitivity testing of Haemophilus species. Hemin and NAD are added as the X and Y factors.





Sheep Blood Agar Code: 4050

A non selective, highly nutritious general purpose medium. For the growth of nutritionally fastidious organisms. The additional of defibrinated Sheep Blood at a concentration of 5% give typical alpha & beta haemolysis by Streptococci and other haemolytic organism.





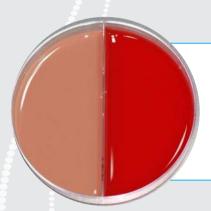
O Bi-Plates 90mm

SHEEP BLOOD AGAR/CHOCOLATE

Code: 2010

Refer mono plates Code # 1009 & 1027





SHEEP BLOOD AGAR CHOCOLATE BACITRACIN AGAR

Code: 2018

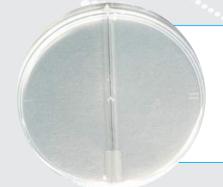
Refer mono plates Code # 1009 or 1029

THAYER MARTIN/CHOCOLATE

Code: 2080

Refer mono plates Code # 1009 & 1027





CHROMagar PSEUDOMONAS / CETRIMIDE AGAR

Code: 2012

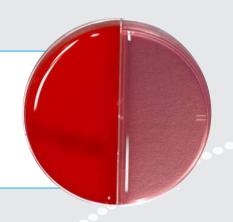
Refer mono plates Code # 1010 or 1024

Bi- Plates

COLUMBIA HORSE BLOOD MacCONKEY CV.

Code: 2050

Refer mono plates Code # 1033 & 1057





COLUMBIA PNBA/MacCONKEY CV.

Code: 2040

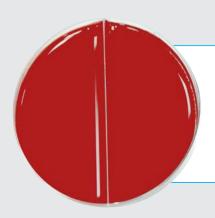
Refer mono plates Code # 1036 & 1057

GARDNERELLA/THAYER MARTIN

Code: 2015

Refer mono plates Code # 1050 & 1087





HOYLES MEDIUM/HOYLES MEDIUM

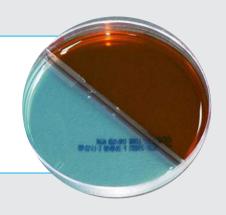
Code: 2052

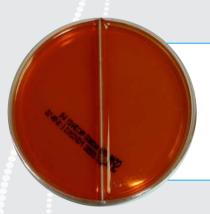
Refer mono plates Code # 1052

O Bi-Plates 90mm

LEVINE EMB/CLED Code: 2037

Refer mono plates Code # 1055 & 1030





MacCONKEY/MacCONKEY

Code: 2058

Refer mono plates Code # 1058

MH 4% SALT/ MH 4% SALT W /OXACILLIN

Code: 2025

Refer mono plates Code # 1070





SALMONELLA SHIGELLA/ HEKTOEN ENTERIC

Code: 2028

Refer mono plates Code # 1084 & 1051

Bi- Plates

SALMONELLA SHIGELLA /MACCONKEY AGAR

Code: 2026

Refer mono plates Code # 1084 & 1058





SALMONELLA SHIGELLA/ T.C.B.S. AGAR

Code: 2046

Refer mono plates Code # 1084 & 1090

SALMONELLA SHIGELLA/ SALMONELLA SHIGELLA

Code: 2084

Refer mono plates Code # 1084





SABOURAUD DEXTROSE/ MYCOLOGICAL AGAR

Code: 2075

Refer mono plates Code # 1081 & 1072

O Bi-Plates 90mm

SHEEP BLOOD/CLED AGAR

Code: 2023

Refer mono plates Code # 1009 & 1030





SHEEP BLOOD / MACCONKEY

Code: 2021

Refer mono plates Code # 1009 & 1058

SHEEP BLOOD/MACCONKEY W/CS

Code: 2020

Refer mono plates Code # 1009 & 1057

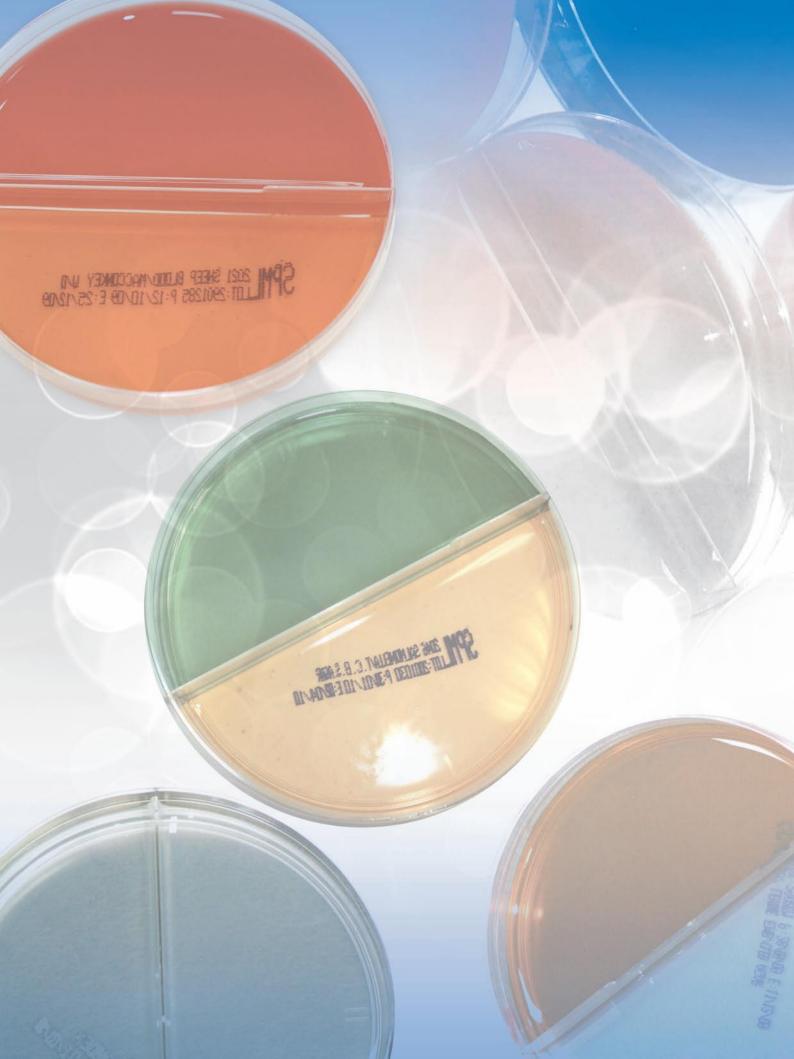




XLD/XLD

Code: 2096

Refer mono plates Code # 1096







Acid Egg Medium

Code: 5002



A solid medium for the isolation and differentiation of Mycobacterium species other than M. Leprae. The presence of glycerol enhances the growth of Mycobacterium tuberculosis.

Acid Egg Medium w/pyruvate

Code: 5003



A solid media for the isolation and differentiation of Mycobacterium species other than Mycobacterium leprea. Pyruvate is added instead of glycerol to enhance the growth of Mycobacterium bovis.

Alkaline Peptone Water

Code: 5007



Alkaline Peptone Water is generally used as an enrichment medium in the isolation of vibrio species from faeces but may also be used for food and water testing. The high pH of the medium inhibits most enteric organisms for at least 24 hours.

Brain-Heart Infusion Agar Slant

Code: 5040



BHI agar slant is a general purpose media that may be used for the cultivation of pathogenic bacteria, yeast and moulds.

Brain-Heart Infusion Broth

Code: 5050



A very nutritious isotonic general purpose medium with a low concentration of Glucose to stimulate early growth, Brain Heart Infusion Broth is suitable for the isolation of most micro-organisms including many fastidious organisms. It is also used to prepare the inocula for antimicrobial susceptibility testing. BHI anaerobic bacteria, yeasts and moulds.

Brilliant Bile Broth 2%

Code: 5052



Brilliant Green Bile Broth 2% is a selective medium that may be used for the detection of coliform organisms in foods, dairy products, water and wastewater, as well as in other materials of sanitary importance. Bile and brilliant green are employed in the formula to inhibit growth of most organisms other than coliforms. Coliform detection is based on lactose fermentation with corresponding accumulation of gas in Durham tubes.

Chocolate Agar Slant

Code: 5060



A highly nutritious medium enriched with sheep Blood, where the blood has been "chocolated" by heating the medium to 60°C. Chocolate sheep blood together with Vit – X supplies all the required nutrients and co-factors, especially X & V factors. It is suitable for the cultivation of most pathogens including many fastidious organisms and is particularly suitable for Haemophilus and Neisseria species.

Cooked Meat Medium

Code: 5056



Code: 5085

Code: 3029

Cooked Meat Medium is an enrichment medium for the cultivation of aerobic & anaerobic bacteria. The medium contains meat particles (beef heart) and has the capacity to promote growth from minimal inocula, important for clinical specimens. Cooked Meat Medium is recommended in standard methods for food testing. Cooked Meat Medium provides an effective maintenance medium.

Dermatophyte Test Medium

Dermatophyte Test Medium is a selective and differential medium used for the detection and presumptive identification of dermatophytes from clinical and veterinary specimens (hair, skin and nails etc). Dermatophytes elaborate alkaline metabolites which elevate medium pH and, in the presence of phenol red indicator, change the medium colour from yellow to red. Cycloheximide, gentamicin and chloreteracycline are employed as selective agents to suppress growth of saprophytic fungi and bacteria.

Cystine Tryptic agar with sugars

5070	plain	E OR BOTA CTA NOTH 12 DENTROSS	
5074	Dextrose	E(E)ESORELY PORTUGES ECENTRIC	
5077	Lactose	5074 CTA HITH 17 DEXTROSE 6902217 POTAUGOS EDERUGIO	
5078	Maltose		
5083	Sucrose	EOTA CTA HITH 1/ DENTROSE	

CTA is a semi solid basal medium that may be used for the detection of organism motility and for maintenance of stock culture. Carbohydrates are added at a concentration of 1%. Fermentation is indicated by a change of colour from red to yellow and motility by the feathering growth of a stab culture. When used for the presumptive identification of Neisseria species a very heavy inoculum should be used for the best result.

Fluid Thioglycolate Medium

Fluid Thioglycolate medium may be used for the cultivation of both aerobic and anaerobic microorganisms. It is also recommended for use in testing the sterility of products. Blood cultures: Inoculate blood culture media in the ratio of one part blood to 10-20 parts of media and mix well. Incubate cultures at 35-37 °C and examine them daily for up to 5-7 days. Subculture aerobic cultures at 24 hours and anaerobic culture at 48 hours. Make a final subculture before discarding negative cultures.

Gram Negative Broth

Code: 5100



The medium is recommended for the enrichment of gram negative microorganisms from clinical, industrial and environmental sources. The medium is particularly recommended for the promotion of Shigella growth.

Hippurate Broth

Code: 5102



This is a test medium for detecting Streptococcus species based on the ability of an organism to hydrolyse hippurate

Kligler Iron Agar

Code: 5104



This is a differential medium for the identification of enterobacteriacae that utilises a double sugar fermentation reaction and the production of Hydrogen Sulphide where appropriate. The two sugars in the medium are Lactose and Glucose, Ferric Citrate is also included as an indicator of

the presence of Hydrogen Sulphide.

Using a pure culture of the test organism which should be smeared onto the surface of the slope and stabbed into the butt of the medium. For details of the many reactions that may arise during the use of this medium reference should be made to one of the many standard textbooks in microbiology.



Lactose Broth

Code: 5105 (Double) Code: 5106 (Single)



Lactose broth may be used for detection of coliforms in water, milk, and food. It may also be used as a pre-enrichment medium for initiation of Salmonella growth in the testing of food that received dry heat treatment. Foods that have been treated by dry heat are expected to harbour a lower microbial population than raw foods and the use of a non inhibitory pr-enrichment broth is appropriate. Coliform detection is based on gas accumulation in Durham tubes as a result of lactose fermentation.

Lauryl Tryptose Broth

Code: 5107 (Double)
Code: 5108 (Single)



Code: 5296

Code: 5247

Lauryl Tryptose Broth, which is also known as Lauryl Sulfate Tryptose Broth, is used for the detection of coliforms in water and food. Coliform growth is indicated by accumulation of gas within inserted Durham tubes. Incubate for up to 48 + /-2 hours at 35 °C. Accumulation of gas in Durham tubes is presumptive evidence of the presence of coliforms in the sample. Turbidity is not a criterion.

Lauria - Bertani Broth

It is the most common enrichment liquid medium used to grow bacteria such as E. coli. It is an excellent medium because it is very efficient at stimulating growth and is suitable for many different organisms. It contains peptides and peptones, vitamins and trace elements needed for bacteria to proliferate. It consists of Yeast extract, tryptone and sodium chloride. Sodium chloride is added to keep the broth at certain ionic strength. Bacteria that contain plasmids tend to grow best in broth that has between 5 to 10 grams salt.

Leptospira Broth

Leptospira broth is used for the recovery of Leptospira species from clinical specimens.

Code: 5103

Letheen Broth Modified

Letheen Broth Modified is used for the microbiological testing of cosmetics. Beef extract, included in the Letheen Broth bases, and peptone provide carbon and nitrogen sources required for good growth of a wide variety of bacteria and fungi. The peptone level was increased in the modified Letheen Broth formula to provide for better growth. Vitamins and cofactors, required for growth as well as additional sources of nitrogen and carbon, are provided by yeast extract. Sodium chloride provides a suitable osmotic environment. This media also contain polysorbate 80, lecithin and sodium bisulphite to partially neutralize the preservative systems commonly found in cosmetics.

Loeffler Serum Medium

Code: 5109



This medium is generally used in the primary isolation of Corynebacterium diphtheriae. It is not selective and suspicious colonies require further investigation for confirmation usually a selective tellurite medium together with specific staining methods (e.g. Albert's Stain).

Lysine Iron Agar

Code: 5115



It is used as an aid in the differentiation of Enterobacteriaceae on the basis of lysine decarboxylation and lysine deamination. Lysine decarboxylation is indicated by an alkaline reaction – purple in the butt of the tube. Lysine deaminase is indicated by reddened slant. H2S production is indicated by blackening of the medium.

Lowenstein-Jensen w/glycerol

Code: 5110



Lowenstein - Jensen Medium is used with fresh egg and glycerol for the isolation and differentiation of Mycobacterium species. The use of egg-based media for primary isolation of mycobacterium has two significant advantages. First, egg-based media support a wide variety of mycobacterium. Second, growth of mycobacterium on egg media can be used for niacin testing.

Lowenstein-Jensen w/5% Nacl

Code: 5111



Lowenstein – Jensen is used for detection of sodium chloride tolerance to aid in the differentiation of mycobacterium species.

Lowenstein-Jensen deep

Code: 5112



A solid medium used to differentiate Mycobacterium species on the basis of the catalase test.

Lowenstein-Jensen w/pyruvate

Code: 5113



A solid media for the isolation and differentiation of Mycobacterium species other than Mycobacterium Leprae. Pyruvate is added instead of glycerol to enhance the growth of Mycobacterium Bovis

MacConkey Broth

Code: 5118



MacConkey Broth is used for cultivating gram-negative, lactose fermenting bacilli in milk, water and foods as a presumptive test for coliform organisms.

MacConkey Broth Purple

Code: 5119



A long established medium for use in the detection and enumeration of coliforms and Escherichia coli in food and water samples. The inclusion of Bromocresol Purple indicator makes the colour change caused by acid production easy to read with gas formation being indicated by the presence of a bubble in the Durham Tube.

Middelbrook 7H10 Agar

Code: 5120



For primary and secondary cultivation of mycobacterium and to detect their sensitivity to antimicrobial agents. The use of Middelbrook 7H10 Agar instead of Lowenstein – Jensen medium in antibiotic sensitivity test, eliminates the bond of drugs to the organic molecules of LJ medium and the problems relating to the solidification of the medium.

Middelbrook Broth 7H9 w/glycerol

Code: 5121



This liquid medium which has been supplemented to support the growth of most mycobacterium species.

Middelbrook 7H9 w/Tween

Code: 5122



The same as 5121 except the glycerol has been replaced with tween 80. This is tellurite reduction medium for differentiation of mycobacterium species Based on tellurite reduction.

MIL Medium Code: 5123

MIL Medium is used for differentiating Enterobacteriaceae based on motility, lysine decarboxylation, lysine deamination and indole production. Peptones provide the carbon and nitrogen sources required for good growth of a wide variety of organisms. Yeast extract provides vitamins and cofactors required for growth. Lysine hydrochloride is present as a substrate to detect lysine decarboxylase or lysine deaminase activity. Dextrose is an energy source. Ferric ammonium citrate is an H2S indicator. Bromcresol purple is a pH indicator. Agar is the solidifying agent.

MIO Medium

Code: 5159



Motility Indole Ornithine (MIO) Medium is used to demonstrate motility, indole production and ornithine decarboxylase activity for the differentiation of Enterobacteriaceae. This medium allows detecting motility, indole and ornithine decarboxylase production in one tube as an aid in the identification of members of the Enterobacteriaceae family.

Mueller Hinton Broth

Code: 5125



Mueller Hinton Broth is used for use in the broth dilution procedures for determining the antimicrobial susceptibility of aerobic bacteria and preparation of standardized inoculums for use in the agar dilution method for antimicrobial susceptibility determination.

Nitrate Broth Code: 5131

Nitrate broth is used for cultivation of microorganisms that are to be tested for the capacity to reduce nitrate to nitrite.

Nutrient Agar Slant

Code: 5135



A general purpose medium for the cultivation of organisms that is less fastidious in their nutritional requirements. Generally used to maintain cultures or to check the purity of subcultures from isolation media

Nutrient Agar Aliquot

Nutrient Broth is used for the cultivation of a wide variety of microorganisms. Nutrient Broth is used as a pre-enrichment medium when testing certain foods and dairy products for Salmonella species. In dried or processed foods, salmonellae may be sublethally injured and in low numbers. The presence of other bacteria and food sample components may hinder growth and recovery of Salmonella species. Pre-enrichment in a nonselective medium such as Nutrient Broth allows for cell damage repair, dilutes toxic or inhibitory substances, and provides a nutritional advantage to Salmonella over other bacteria. Nutrient Broth is included in many standard methods procedures for testing food, dairy products, and other materials.

Code: 5136

O-F Medium

Code: 5150



O-F Media is used for the determination of oxidative and fermentative metabolism of carbohydrates by gram negative rods of the basis of the acid reaction in either the open of closed system. Changes in the covered agar are considered to be due to true fermentation, while changes in the open tubes are due to the oxidative utilization of the carbohydrate present. Oxidative carbohydrate utilization is indicated by acidification (yellowing), of media in the open tube only. Fermentative organisms produce an acid reaction in both the covered and uncovered media. Organisms that are neither oxidative nor fermentative produce no change in the covered medium and an alkaline reaction in the uncovered medium.

Phenylalanine Agar Slant

This agar slant is used as an aid in differentiation of Proteus, Morganella, Providencia and E. Agglomerans from other enteric bacilli. The medium utilizes deamination of phenylalanine to phenylpyruvic acid as the basis for differentiation. The presence of phenylpyruvic acid is indicated by formation of a green colour in the presence of ferric chloride reagent.

O-F Medium w/1% Dextrose

Code: 5151



Code: 5174

O.N.P.G. Medium

Code: 5164



O.N.P.G Medium is used to distinguish between delayed lactose fermenters by microorganisms and true lactose nonfermentation. Two enymes are required for lactose fermentation to take place.

- An induced intracellular enzyme, B-galactosidase, which hydrolyses Lactose and
- A permease which regulates the uptake of Lactose into the cells. Lactose nonfermenters possess neither enzyme. Delayed lactose fermenters are deficient in permease. ONPG broth turns yellow in the presence of beta galactosidase and indicates lactose fermenting capability

Phenol Red Broth

Code: 1% glucose, 5168 Code: 1% maltose, 5169 Code: 1% sucrose, 5170



Phenol Red Broth Base is used with carbohydrates for the differentiation of microorganisms on the basis of carbohydrate fermentation reactions. The fermentative properties of bacteria are valuable criteria in their identification. The concentration of carbohydrate generally employed for testing fermentation reactions of bacteria is 0.5 to 1%.

Rappaport -Vassiliadis Soya Broth

Code: 5297



This is an alternative to Selenite and Tetrathionate broths, as a selective enrichment broth for the isolation of Salmonellae species from food, dairy and environmental samples and is claimed by some workers to be superior to both these formulations. It can also be used in clinical bacteriology but care must be taken to ensure that only a light inoculum is used. Malachite Green and Magnesium Chloride are included in the formulation as selective agents due to their ability to inhibit most enteric organisms but allow salmonellae to multiply freely.

(NB:-THIS MEDIUM IS NOT RECOMMENDED FOR USE WHEN SALMONELLA TYPHI IS SUSPECTED)

Sabouraud Dextrose Agar Slant

Code: 5190



A long established selective medium for the isolation of yeasts and fungi suitable for use in all areas of Mycology. The low pH (5.6) of the medium inhibits most bacteria and spore structures and pigmentation of fungi are generally well developed on this medium.

Selenite Broth

Code: 5210



Code: 5211

Selenite Broth is a selective enrichment medium that may be used for the cultivation of Salmonella from specimens harbouring mixed flora from faeces, urine, water, foods and other materials of sanitary importance.

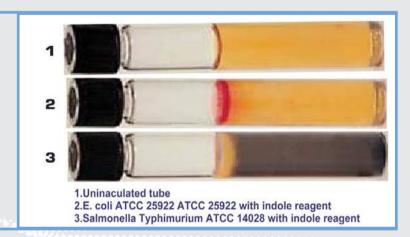
The selective agent sodium selenite possesses a high level toxicity at neutral pH for E. coli but not for the major part of microorganisms belonging to the Salmonella group.

Selenite Cystine Broth

Selenite cystine broth is a selective is a selective enrichment medium that may be used for the cultivation of Salmonella from specimens harbouring mixed microbial flora. It is recommended for testing food products for Salmonella contamination. It is also used in clinical microbiology for the cultivation of faecal specimens. Sodium selenite, the selective agent, inhibits the growth of faecal streptococci and is moderately inhibitory to growth of E. coli, particularly during the first 8-12 hours of incubation.

SIM Medium

Code: 5218



Sulfide Indol Motility Medium is used to detect hydrogen sulphide production, indole production and motility by enteric gram – negative bacilli. Tryptophan, the amino acid required for indole production, is contained in the casein peptone constituent. Compounds of iron and sulphur are provided to permit detection of H2S production. The semi – solid state of the medium permits detection of motility

Simmon Citrate Agar

Code: 5215



Simmons citrate is used to differentiate enteric gram – negative bacilli on the basis of sodium citrate utilization as the sole source of carbon and inorganic ammonium salts as the only source of nitrogen. Growth is usually associated with an alkaline reaction that changes the medium colour from green to blue.

Trichomonas Medium

Code: 5228



This medium is used for the detection and cultivation of Trichomonas species

Todd Hewitt Broth

Todd Hewitt Broth is used for the cultivation of β -haemolytic streptococci and the serological grouping of streptococci. The medium is also used for the cultivation of pathogenic microorganisms, for blood cultures, and for the production of streptolycin by group A streptococci

Triple Sugar Iron Slant (TSI Agar)

Code: 5229



Triple Sugar Iron Agar (TSI Agar) is used for the differentiation of gram-negative enteric bacilli based on carbohydrate fermentation and the production of hydrogen sulphide.

The addition of sucrose increased the sensitivity of the medium by facilitating the detection of sucrose-fermenting bacilli, as well as lactose and/or dextrose fermenters. Carbohydrate fermentation is detected by the presence of gas and a visible colour change (from red to yellow) of the pH indicator, phenol red. The production of hydrogen sulphide is indicated by the presence of a precipitate that blackens the medium in the butt of the tube.

Code: 5226

Tryptic Soya Agar Slant

Code: 5232



Tryptic soya agar is a multipurpose media which supports the growth of a wide variety of microorganisms because of its nutritional characteristics and absence of inhibitors. It is recommended for the isolation of fastidious microorganisms, for maintaining stock cultures.

Tryptic Soy Broth

Tryptic Soya Broth is a general purpose medium for the cultivation of nutritionally fastidious aerobic microorganisms. It is widely used as a blood culture medium and also for testing the sterility of products.

Urea Agar Slant

Code: 5279



Code: 5235

Urea Agar may be used as an aid in the differentiation of microorganisms, particularly enteric gram-negative bacilli, on the basis of urea hydrolysis. Ammonia production associated with urea hydrolysis elevates the medium pH and changes the colour to purple in the presence of phenol red indicator.

Urea Broth Code: 5282

Urea Broth is used in the differentiation of enteric gram-negative bacilli on the basis of rapid urea hydrolysis. The composition of the medium supports excellent growth of proteus. Organisms produce an alkaline reaction will change the medium colour to purple in the presence of phenol red indicator.

Code: 5284

Urea Indole Motility Medium

UIM - Urea /Motility/Indole medium as the name suggests, it is used to determine urease activity, motility and Indole production by Enterobacteriaceae.

Urease activity: is observed by a change of color to red

Motility: is observed by growth extending from the line of inoculation

Indol production: is observed by a pink to red reaction after the addition of 2/4 drops of covacs reagent.

This is best described as a multi-purpose medium for differentiation of enterobacteriacae that combines three individual tests into a single medium. For use the medium is inoculated by making a single stab into the medium with a straight wire (or equivalent) using a pure culture (or discrete single colony) of the test organism.

Following incubation it is recommended that the medium should first of all be examined to determine whether or not the organism is motile. The presence of motility is apparent by the organism tracking out from the line of inoculation and often turning the medium turbid. Non-motile organisms generally grow within the stab line leaving the surrounding medium clear.

Urease positive organisms turn the medium bright red due to the hydrolysis of the Urea in the presence of the Phenol Red Indicator often making it difficult to determine the other parameters.

Indole is tested for by layering a small amount of Indole Reagent (Erlich's or Kovac's appear to work equally well) onto the surface of the medium and allowed a few minutes to react. A positive result is indicated by the formation of a red line at the interface of the reagent and the medium.

Cat # 5284 Urea Indole Motility



Before Reaction



After Reaction

Media for Petroleum Microbiology









Media for petroleum Microbiology

NO	PRODUCT	CODE
1	GENERAL AEROBIC BACTERIA BROTH IN 10% QURAYYA SEAWATER	3501
2	GENERAL AEROBIC BACTERIA BROTH IN 100% QURAYYA SEAWATER	3500
3	GENERAL AEROBIC BACTERIA BROTH IN 15 % QURAYYA SEAWATER	3507
4	GENERAL AEROBIC BACTERIA BROTH IN 5% QURAYYA SEAWATER	3506
5	SULPHATE REDUCING BACTERIA BROTH IN 10% QURAYYA SEAWATER	3503
6	SULPHATE REDUCING BACTERIA BROTH IN 100% QURAYYA SEAWATER	3502
7	SULPHATE REDUCING BACTERIA BROTH IN 15% QURAYYA SEAWATER	3510
8	SULPHATE REDUCING BACTERIA BROTH IN 5% QURAYYA SEAWATER	3509
9	YEAST & MOULD (Y/M) BROTH IN 10 % QURAYYA SEAWATER	3504
10	YEAST & MOULD (Y/M) BROTH IN 5 % QURAYYA SEAWATER	3505





O BOTTLED MEDIA

BLOOD CULTURE BOTTLES

A blood culture is done when a person has symptoms of a blood infection or bacteremia. Blood is withdrawn from the person and is then tested in a laboratory to find and identify any microorganism present and growing in the blood. This allows the physician to prescribe antibiotics if a microorganism is found.





FLUID THIOGLYCOLLATE MEDIUM









O BLOOD PRODUCTS

1. Sheep blood, defibrinated

All SPML's sheep blood products are collected, processed and handled in such a way that maintains the best quality. Blood is collected from our quarantined herds owned by SPML. Defibrinated sheep blood is added to certain microbiological media to enhance nutrient qualities and to detect Haemolytic ability of bacteria



2. Sheep blood Alsever's

Sheep blood is collected in Alsever's solution to preserve the erythrocytes (red blood cells) for a prolonged period when the blood is to be used in serological procedures.



3. Horse Blood and serum

Defibrinated Horse Blood and serum supplied by SPML are imported from an approved supplier. All supplier procedures are licensed with stringent veterinary inspection ensuring the selected animals are healthy and free from any medication. These products are used as nutrient components in the preparation of certain microbiological culture media. Horse blood is also used as an indicator of haemolytic activity.



BLOOD PRODUCTS

QUALITY ASSURANCE

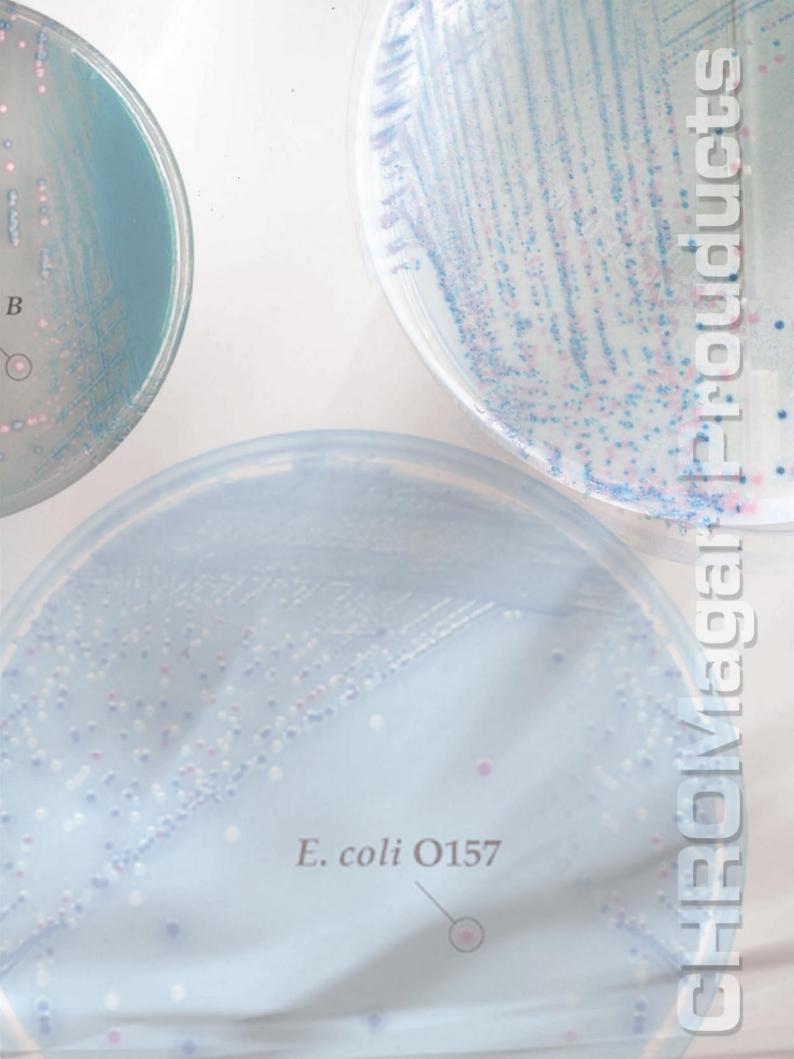
Quality control for both sterility and bacterial growth parameters are carried out on every batch of donor animal blood. Representative samples of blood are taken throughout the collection and dispensing process. When no bacterial growth occurs after 5-7 days, it will be released by our QC department for use. Samples from each batch are also tested for growth assays of selected bacterium to ensure that when added to the appropriate basal media they support good growth of clinically important bacterial species.



Notes: Do not use sheep blood if it is contaminated, if it is excessively haemolysed or if the expiration date has passed. No anticoagulant is added. The blood should be kept at 4 0C and brought to room temperature before use.

DO NOT FREEZE







commemorates

the 30th anniversary of the 1st Chromogenic culture media!

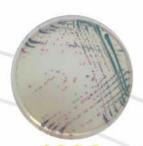
patented by Dr Alain Rambach in 1979!



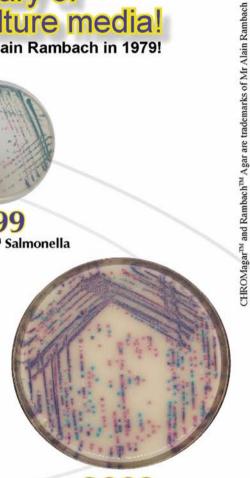
1979 Invention of the 1st chromogenic culture media



1989 Rambach™ Agar



1999 CHROMagar™ Salmonella



2009 CHROMagar™ Salmonella Plus

30 years of innovative products 1979-2009

CHROMagar products distributed by:



Saudi Prepared Media Laboratory Co, Ltd.

P.O. Box - 2751 Riyadh 11461, Kingdom of Saudi Arabia Tel: 01 4767931, 4778313, Fax: 01 4778313 info@spml.com www.spml.com.sa

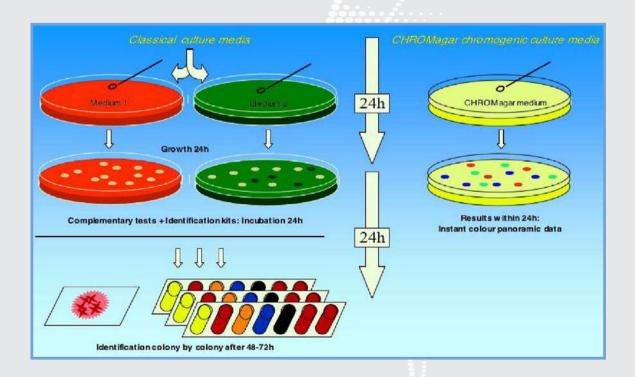
CHROMagar Product

Chromogenic Agar Media

Chromogenic agar media contains artificial substrates (chromogens) that when hydrolyzed by specific microbial enzymes produce colored compounds. SPML is introducing a range of Chromogenic ready to use media from "CHROMagar Paris France" — the Chromogenic media pioneer. We can now offer a range of ready to use chromogenic media to assist lab professionals' quicker identification of specific microorganisms that will allow differentiation of single pathogen by a single colour.

The advantages of CHROMagars:

- CHROMagar chromogenic media revolutionize microbiological testing while still maintaining traditional agar testing techniques
- This assures easy differentiation of microorganisms without complex and costly traditional detection procedures.
- Colonies of specific microorganisms are recognizable at a glance by the colour and this increases the efficiency of laboratory testing and also save time and labor.



O CHROMagar Products

CHROMagar Candida

Yeasts are increasingly important pathogens for immune-suppressed people such as the elderly, AIDS patients, etc. CHROMagar Candida is a new differential culture medium that facilitates the

isolation and identification of clinically important yeast species. This medium is especially useful in detecting mixed yeast infections. It allows a complete view of mixed populations of yeasts, while inhibiting the majority of bacterial species.

It provides the differentiation of C. Albicans, C. Tropicalis and C. Krusei based on differences in colony morphology and colour.

Code: 1037

Code: 1047



Organism	Colony Colour	Recommended Incubation	
Candida albicans	Green colonies	Aerobically at 37°C	
Candida tropicalis	Metallic blue colonies	for 18 – 24 hours.	
Candida krusei	Pink velvet colonies		

CHROMagar Orientation

CHROMagar Orientation has been developed primarily for differentiation and presumptive identification of the main organisms, gram negative and gram positive, usually found in Urinary Tract Infections. However CHROMagar Orientation has a broader application as a general nutrient agar for the isolation of various microorganisms.

It presents an instant distinctive colonial colouration to obtain a large spectrum of differentiation of species. In most cases of urine samples, that allows full differentiation of the pathogens within 24 hours reducing the need for additional testing. Indole test for confirmation of E. Coli and TDA tests for proteus spp. Can be performed directly from the medium



Organisms	Colony Colour	Recommended Incubation	
Enterococcus faecalis	Turquoise blue		
Escherichia coli	Red		
Proteus mirabilis	Clear + brown halo	Aerobically at	
Staphylococcus aureus	Colourless Opaque colonies	37°C for 18 – 24 hours.	
Klebsiella, Citrobacter	Metallic blue		
S. saprophyticus	Pink opaque		

Code: 1001

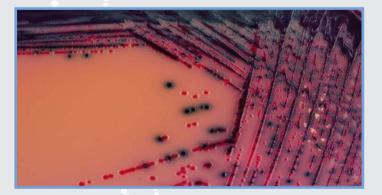
Rambach Agar

The conventional media for the detection of Salmonella by H2S character has a very poor specificity creating an abondance of false positives (Citrobacter, Proteus, etc. as suspect colonies) among the rare real positive Salmonella. The workload for unnecessary examination of suspect colonies is so high that the real positive Salmonella colonies might often be missed in a routine testing. In order to distinguish the real positive, the conventional method requires the tedious examination of 10 colonies per suspected sample. On the other hand Rambach Agar will eliminate most false positives and allow the technicians to focus all attention on rare suspected samples. These samples could be further identified as real positive for Salmonella. Because Rambach Agar has a very high specificity: (1) fewer samples are positive and have to be checked and (2) there is no further need to investigate 10 different colonies per sample. Overall workload will be reduced and in a routine examination one can detect with higher frequency the samples containing Salmonella.

This is particularly useful in case of sudden, dangerous outbreak of Salmonella food poisoning.

Organism	Colony Colour	Recommended Incubation
Salmonella	Red	
E. Coli, coliforms	Blue	Aerobically at 37°C for 24 hours.
P. mirabilis	Colourless or inhibited	



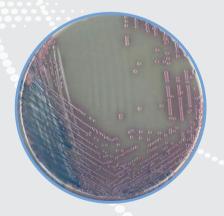


CHROMagar Salmonella

Code: 1045

The conventional medium for the detection of Salmonella has a very poor specificity. This creates a lot of false positives (citrobacter, proteus, etc) as suspect colonies among the real rare positive Salmonella. The workload for unnecessary examination of suspect colonies is so high that the real positive salmonella colonies might often be missed in routine testing. In order to distinguish the real positive, the conventional method requires the tedious examination of 10colonies per suspected sample. Rambach Agar or CHROMagar Salmonella will eliminate most false positives and allow the technicians to focus all their attention on rare suspected samples. These samples could be correctly identified as a real positive for salmonella. Rambach Agar and CHROMagar salmonella have high specificity:(1). Fewer samples are positive and have to be checked and (2). There is no further need to investigate 10 different colonies per sample. This is particularly very useful in case of sudden, dangerous outbreak of salmonella food poisoning.

Organisms	Colony Colour	Recommended Incubation
Salmonella	Mauve	
E. Coli	Blue	Aerobically at 37°C for 24 hours.
P. mirabilis	Colourless or inhibited	





CHROMagar Product:

Code: 1019

CHROMagar E.Coli and CHROMagar ECC & CHROMagar Liquid ECC

The bacterium E. coli is an indicator of fecal contamination. It is very useful in monitoring food hygiene. The general food standard limits are approximately 50 E. coli bacteria per gram, therefore, it is important to detect and enumerate them correctly. Traditional methods for detecting E.coli are extremely tedious and usually heavy overload with experimental studies of many colonies.

One can choose the pour method with food dilutions, or the membrane filtration method for detection from 100ml of water with the inoculated membrane placed on the agar plate.

Pour Technique: Prepare 90mm sterile petri dishes & add 1ml of inoculums in each. Then pour 10ml of melted medium. Mix & let solidify. Invert & incubate.

Surface Technique: Pour medium into petri dishes. Store in the dark before use. Streak the sample or place the inoculated membranes on plate surface.

CHROMagar E.coli

CHROMagar E.coli is a culture medium which directly shows the E. Coli colonies in a blue colour thus making the detection and enumeration of this important hygiene indictor as simple as possible.

The bacteria E.coli is an indicator of fecal contamination, very useful in monitoring the food hygiene. The general food standard limits are usually approx. 50 E.coli bacteria per gram and thus it is important to detect and enumerate them correctly. Traditional methods for E.coliare extremely tedious and require heavy overload with experimental studies of many colonies.

On the contrary CHROMagar E.coli is a culture medium showing directly E.coli colonies in blue color - thus making the detection and the enumeration of this important hygiene indicator as simple as possible.

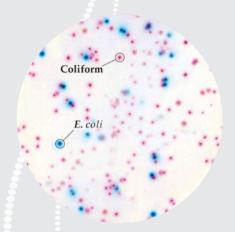


Organisms	Colony Colour	Recommended Incubation
E. coli	Blue	
Other gram negative	Colourless	Aerobically at 37°C for 24 hours.
Gram positive	Inhibited	101 24 110013.

CHROMagar ECC

CHROMagar ECC allows for the rapid and reliable detection and differentiation of E.coli and other coliforms. A conventional medium involve complex and costly detection procedures and is often non-specific. CHROMagar ECC media allows colonies of specific microorganisms to be recognizable by their colour. CHROMagar ECC will additionally show other coliforms as red colonies.

This is another useful indicator of questionable hygiene conditions.



Organisms	Colony Colour	Recommended Incubation
E. Coli	Blue	
Coliforms	Mauve, light purple	Aerobically at
Gram negatives (eg. Proteus)	Colourless	Aerobically at 37°C for 24 hours.
Gram positive	Inhibited	

Code: 1017

Code: 1103

CHROMagar liquid ECC

CHROMagar liquid ECC is a broth with the pad technique for the detection of E. Coli and coliforms in water samples. With this method, the filtration membrane is put on top of a pad pre-soaked with CHROMagar liquid ECC.

Organisms	Colony Colour	Recommended Incubation
E.Coli	Blue	Aerobically at 37°C for 24 hours.
Other Coliforms	Red	

CHROMagar Product:

AquaCHROM Code: 1102

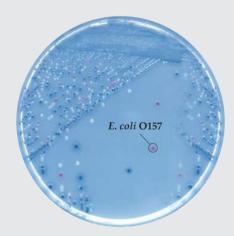
AquaCHROM is a non – agar based medium designed to detect the presence of E.coli and other coliforms in 100ml water samples. Its advantage, compared to other similar commencially available tests, resides in the fact that there is no need of ultra – violet lamp to confirm the presence of E. Coli in the sample. The sample AquaCHROM uses two different chromogens which enables test results to be read under normal lighting conditions. Samples develop a yellow colouration when coliform are present and a green colouration when E. coli is present.

Organisms	Colony Colour	Recommended Incubation
E. Coli	Blue to blue green	
Coliform (No E. Coli)	Yellow	A 1: II + 270C (241
Bacteria (no coliform)	Colourless, cloudy	Aerobically at 37°C for 24 hours.
No bacteria	Translucent	

CHROMagar 0157

The conventional medium for the detection of E. Coli O157, sorbitol Mac Conkey, has a very poor specificity therefore creating the abundance of false positive (proteus, E. Hermanii, etc) Sorbitol Mac Conkey is also difficult to read due to the change in coloration in case of prolonged incubation.

E. coli O157 is detected as mauve colonies among blue and colourless colonies instead of colourless colonies among red colonies on traditional SMAC agar (Mac Conkey - Sorbitol Agar)



<u>~</u>		
Organisms	Colony Colour	Recommended Incubation
E.Coli 0157	Mauve	
E. coli Spp	Blue	Aerobically at 37°C for 24 hours.
Other	Blue, colourless or inhibited	tor 24 hours.

Code: 1101

CHROMagar Listeria

Listera monocytogenes is a pathogenic bacterium which can cause serious food poisoning. For the detection of Listeria Monocytogenes, conventional methods are long and they require heavey work load. On the contrary, the medium CHROMagar Listeria helps to easily differentiate Listeria Monocytogenes from other Listeria directly at the isolation step. L. Monocytogenes colonies are blue and are surrounded by a halo due to a specific phospholipase activity.



Organisms	Colony Colour	Recommended Incubation
L. monocytogenes	Blue with white halo	Aerobically at 37°C for 48 hours.
L.innocua	Blue	3/°C for 48 hours.

Code: 1107

Code: 1105

CHROMagar Identification Listeria

Confirmity tests for Listeria monocytogenes species are time consuming and significantly increase the laboratory workload. A single spot of a suspect colony out of CHROMagar Listeria directly put onto chromagar identification, will provide confirmation of L. Monocytogens species within 24 hours.

Organisms	Colony Colour	Recommended Incubation
L. Monocytogens	Rose surrounded by a white halo	
L. Ivanovii	Colourless surrounded by a white halo	Aerobically at 37°C for 24 hours.
L. Innocula	Rose without halo	,
B. Cereus	Colourless with irregular edge	· · · · · · · · · · · · · · · · · · ·

CHROMagar Product

Code: 1109

Code: 1031

CHROMagar StrepB

Group B Streptococcus (GBS) has been associated with severe neonatal infections such as septicaemia and meningitis. The detection of vaginal colonisation by GBS in pregnant women is the most effective strategy to prevent neonatal infections. CHROMagar StrepB is a powerful screening tool, sensitive and highly specific, allowing detection of GBS after 18-24 hours of aerobic incubation.

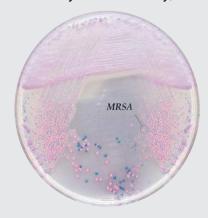


Organisms	Colony Colour	Recommended Incubation
Group B Sterptococcus	Mauve	
Other garm positive	Blue or inhibited	Aerobically at 37°C for 18–24 hours.
Other bacterias	Colourless or Inhibited	

CHROMagar MRSA

Accurate colony selection and timely sensitivity testing are at the forefront of microbiology's battle to contain MRSA infection. Methicilin – resistant Staphylococcus aureus (MRSA) is a major nosocomial pathogen; thus, the ability to identify infection and report on antibiotic sensitivity as early as possible is vitally important. Now CHROMagar MRSA and minimum inhibitory concentration (MIC) testing is to be found in the vanguard of microbiology's fight against this pathogen.

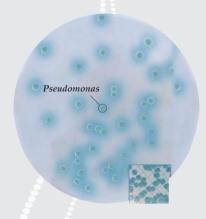
CHROMagar MRSA is a new chromogenic media allowing by a single direct step pre-identification of MRSA, including low level resistant strains with a higher specificity and sensitivity than conventional methods. The medium is made specific for MRSA by the addition of Cefoxitin to inhibit strains of Methicillin Sensitive Staphylococcus aureus. For screening, a lab needs speed, reliability and accuracy, and CHROMagar MRSA delivers these.



Organisms	Colony Colour	Recommended Incubation
MRSA	Rose to mauve	
Methicilin susceptible S. aureus	Inhibited	Aerobically at 37°C for 18– 24 hours.
Other bacterias	Inhibited, colourless, blue	101 10- 24 Hours.

CHROMagar Pseudomonas

CHROMagar is used for the simultaneous detection and enumeration of Pseudomonas aeroginosa with markedly different colouring (blue colonies). It can also be used for membrane filtration method for detection from 100ml of water, with the inoculated membrane on the agar plate.



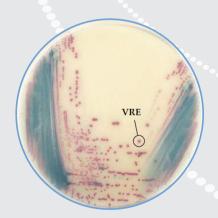
Organisms	Colony Colour	Recommended Incubation
Pseudomonas spp. including P. aeruginosa	Blue - green	Aerobically at 30°C for 24 hours.
Other microorganisms	Generally colourless , Inhibited	

Code: 1010

Cat. No: 1111

CHROMagar VRE

CHROMagar VRE allows for an easily visible detection of VRE E. Faecium / E. Faecalis (transmissible resistance) with a high sensitivity and specificity from the colony colour. The acquired resistance, found in VRE E. Faecium / E. Faecalis, is transferable and can spread fom organism to organism. In contrast, the intrinsic resistance, found in E. Gallinarium / E. Casseliflavus, is not transferable and has not been associated with outbreaks. Vancomycin — resistant Enterococcus (VRE) infections are especially aggressive and have been associated with high mortality rate. The detection and differentiation of the enterococci starins carrying a transmissible resistance (E. Faecalis and E. Faecium) is a top priority in the epidemic control.



Organisms	Colony Colour	Recommended Incubation
VRE E. Faecalis, VRE E. Faecium	Mauve	Aerobically at 37°C for 18– 24
E. Gallinarum, E. Casseliflavus	Blue or Inhibited	hours.
Other	Colorless or Inhibited	

CHROMagar Product

Code: 1106

Code: 1007

CHROMagar KPC

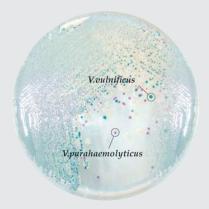
Failure to rapidly detect antibiotic rapidly detect antibiotic resistance in gram negative bacteria has contributed to their uncontrolled spread, and on occasions to therapeutic failures. CHROMagar has introduced a set of selective supplements specially designed for screening gram negative bacteria which express different kinds of reduced antibiotic susceptibility.



Organisms	C o l o n y Colour	R e c o m m e n d e d Incubation
E. Coli	Red	
Klebseilla, Enterobacter, cetrobacter	Metalic Blue	Aerobically at 37°C for 18–24 hours.
Pseudomonas	Creamy, translucent	est to the second

CHROMagar vibrio

V. Parahaemolyticus, V. Vulnificus and V. Cholera are pathogenic bacteria which can cause serious seafood poisoning. For the detection of those bacteria, conventional methods (TCBS) are long, require heavy workload and are not very sensitive. On the contrary, the medium CHROMagar vibrio helps to easily differentiate V.Parahaemolyticus, V. Vulnificus and V. Cholera from other vibrio directly at the isolation step by colony colour with sensitivity higher than conventional methods. V. Parahaemoliticus colonies are mauve, V. Vulnificus and V. Choleare appear as blue colonies while V. Alginolyticus colonies are colourless. The medium is selective against most major enterobacteriaceae and



Organisms	Colony Colour	Recommended Incubation
V. Parahaemolyticus	Mauve	
V. Vulnificus	Blue	Aerobically at 37°C for 18– 24 hours.
V. Cholerae	Blue	Tor 18–24 hours.
V. Alginolyticus	Colourless	

CHROMagar ESBL

Code: 1100

CHROMagar ESBL Supplement added to CHROMagar Orientation contributes in the rapid screening of gram negative ESBL-producing bacteria. CHROMagar ESBL Supplement allows the detection of ESBL-producing bacteria while inhibiting the growth of other bacteria, including those carrying

ampC resistance types. This is an important feature because intrinsic ampC resistance has no clinical relevance, but often leads to ESBL false positive reading in the classical testing methods.





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