HiCrome™

Single Streak Rapid Differentiation Series

HIMEDIA®

Principle of HiCrome™ Media

Principle :

- Extensive Research in the use of chromogens for detection of microorganisms is well documented. HiMedia has developed the highest range of chromogenic media globally (41 media).
- This media are also available in HiCrome™ HiVeg™ version and HiCrome™ HiCynth™ version.
- Significantly eliminates the guesswork - identification and differentiation
- Employs chromogen technology - visual identification
- Reaction: Enzymes are produced by the organisms and the required substrate is provided in the medium.
- Results : Distinct colour identification and differentiation is observed

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Advantages Of HiCrome Media Against Conventional Media

- Saves time and manpower
- Visual colour differentiation makes easy identification
- Cost effective (as more media are required for conventional method)
- Further confirmation becomes easier as HiCrome™ Media narrows down the identification to genus level

Sample processing using Conventional and HiCrome™ Media:

Conventional Media

Sample

↓

Pre-Enrichment (24 hrs)

↓

Selective Enrichment (24 hrs)

↓

Isolation (24-48 hrs)

1. General Media

2. Selective Media

↓

Biochemical Identification (24-48 hrs)

(Total days required 5-6 days)

HiCrome™ Media

Sample

↓

Pre-Enrichment (24 hrs)

↓

Direct streaking on HiCrome™ media (24-48 hrs)

↓

Biochemical identification (For further confirmation)

(Total days required 3-4 days)

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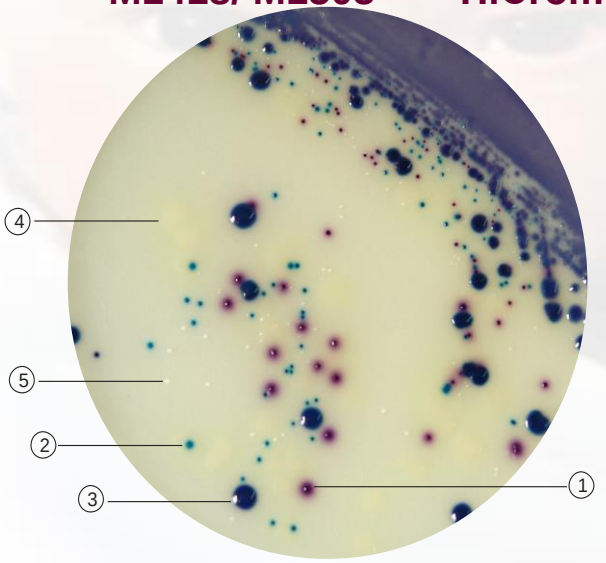
HiCrome™ Media for Clinical Applications

Target Organisms

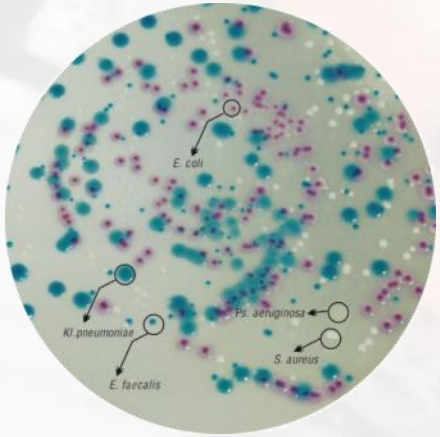
- **UTI Infections**

M1353/ M1353R – HiCrome™ UTI Agar / (with opaque background)

M1418/ M1505 – HiCrome™ UTI Agar, Modified/ HiCrome™ UTI Selective Agar



1. *E. coli* (25922)	- pink to purple
2. *E. faecalis* (29212)	- blue
3. *K. pneumoniae* (13883)	- blue to purple
4. *P. aeruginosa* (27853)	- green
5. *S. aureus* (ATCC 25923)	- colourless
6. P.mirabilis	- brown



Equivalent
M1353/ M1353R –
BD – CHROMagar Orientation
Oxoid – Brilliance UTI Clarity Agar
Remel – Chromogenic UTI Medium

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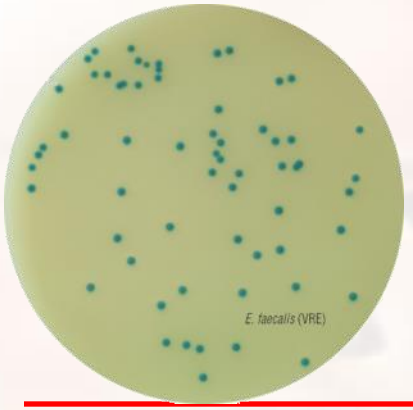
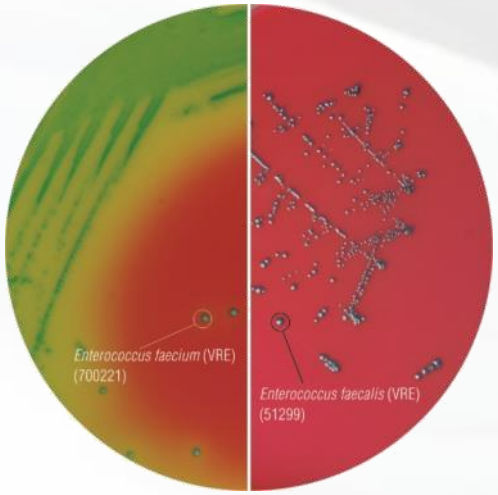
2. Vancomycin Resistant Enterococci

M1830 - HiCrome™ VRE Agar Base



Chromogenic substrate is cleaved by b-glucosidase enzyme which imparts bluish green colour to VRE species
Selective supplement - inhibits VSE and other gram positive organisms
Opaque background for better visibility

M1925 - HiCrome™ VRE Agar Base, Modified



Chromogenic substrate is cleaved by b-glucosidase, enzyme which imparts blue green colour to *Enterococcus* species
Presence of arabinose and phenol red aids to differentiate between *Enterococcus faecalis* and *Enterococcus faecium*
E.faecalis(VRE) - *blue colour and*
E.faecium (VRE) - green w/yellow background

Equivalent
BD – CHROMagar VRE blue / CHROMagar VRE
Oxoid – Brilliance VRE Agar

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Staphylococcus aureus (MRSA/MRSE)

M1674 - HiCrome™ MeReSa Agar Base

The chromogenic mixture incorporated in the medium is specifically cleaved by *Staphylococcus aureus* (MRSA) to give bluish green coloured colonies.

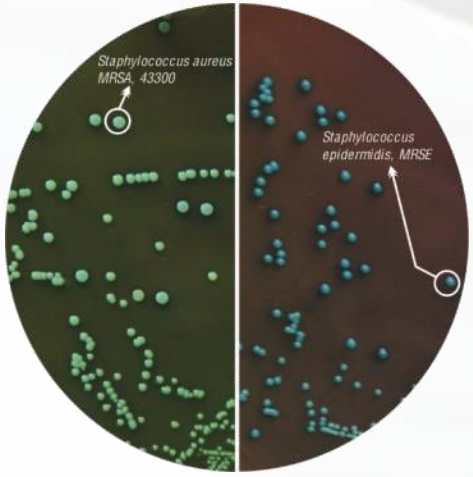
Equivalent : CHROMagar MRSA

M1953 - HiCrome™ MRSA Agar Base, Modified

Staphylococcus aureus (MRSA) - green
Staphylococcus **epidermidis** (MRSE)-blue

Equivalent : Brilliance MRSA

M1974 - HiCrome™ Rapid MRSA Agar Base



The chromogenic mixture incorporated in the medium is specifically cleaved by *Staphylococcus.* Carbohydrate fermentation is detected by phenol red indicator
MRSA - greenish yellow (Note: Green colour may develop after 48 hours)
MRSE – blue
Rapid detection in 18-24 hours

Equivalent : Brilliance MRSA 2 Agar

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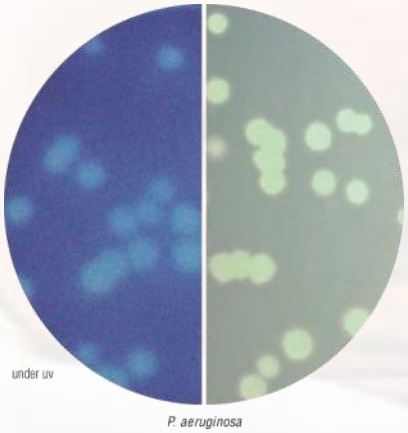
HiCrome™ Media for Clinical Applications

Target Organisms

- ***Pseudomonas* species**

M1469 -- HiFluoro™ Pseudomonas Agar Base



Recommended for selective isolation of *Pseudomonas aeruginosa*

Fluorogenic compound is specifically cleaved by *Pseudomonas* to give fluorescence under uv

Cetrimide - inhibits accompanying microflora other than *Pseudomonas*

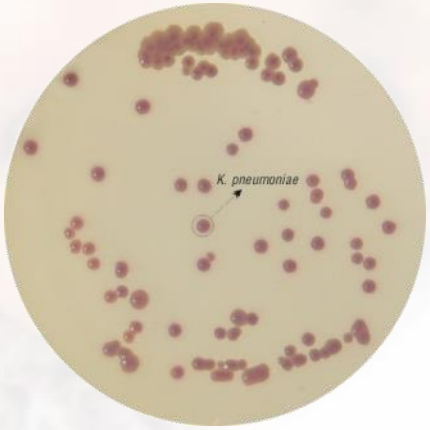
- ***Klebsiella* species**

M1573 -- HiCrome™ Klebsiella Selective Agar Base

Chromogenic substrate is cleaved by *Klebsiella* to give purple- magenta coloured mucoid colonies

Sodium lauryl sulphate and Bile salts mixture - inhibits gram positive organisms.

Selective supplement (carbenicillin) inhibits other accompanying microflora.



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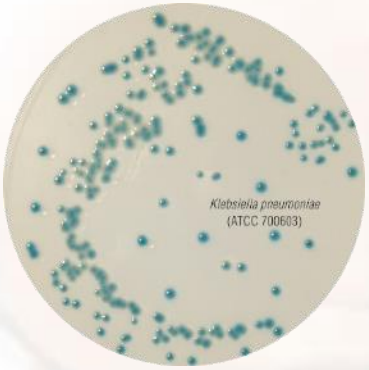
HiCrome™ Media for Clinical Applications

Target Organisms

- ESBL/ Carbapenem Resistant Enterobacteriaceae

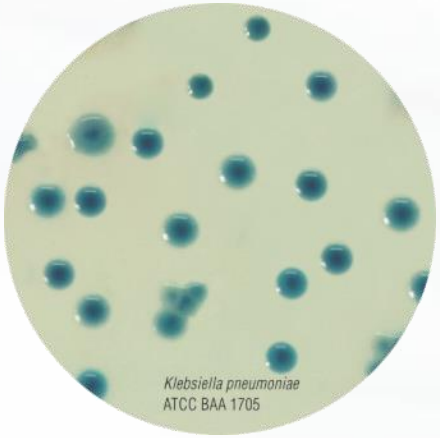
M1829 -- HiCrome™ ESBL Agar Base



E.coli gives pink to purple coloured colonies
Kleb. pneumoniae gives bluish green coloured colonies
Selective supplement helps in selection of ESBL.

Equivalent code :
BD- CHROMagar ESBL
Oxoid – Brilliance ESBL

M1831 -- HiCrome™ KPC Agar Base



Kleb. pneumoniae gives bluish green coloured colonies
Selective supplement helps in selection of carbapenem resistant strains..

Equivalent code :
BD- CHROMagar KPC
Oxoid – Brilliance CRE Agar

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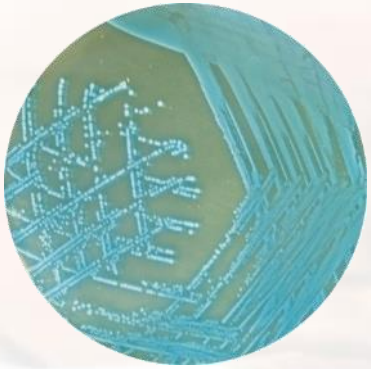
HiCrome™ Media for Clinical Applications

Target Organisms

Group B *Streptococci*

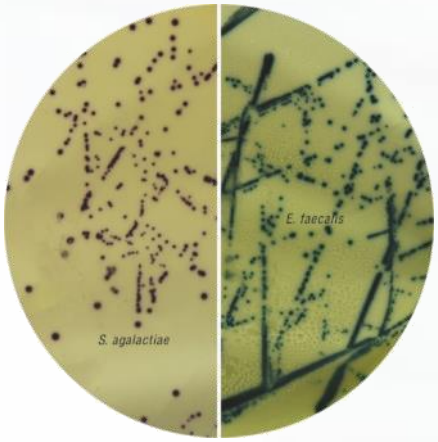
M1840 -- HiCrome™ Strep B Selective Agar Base



Chromogenic substrate is cleaved by β-glucosidase enzyme that imparts blue colour to Group B Streptococcus
Selective supplement - inhibits accompanying microflora
Opaque background for better visibility

Equivalent
BD – CHROMagar Strep B
Oxoid – Brilliance GBS Agar

M1966 -- HiCrome™ Strep B Selective Agar Base, Modified



Chromogenic substrate is cleaved by group B-Streptococccci resulting in purple coloured colonies.
Other Streptococci give blue or greenish blue coloured colonies with yellow background due to fermentation indicated by phenol red.
Selective supplements - inhibits other microorganisms.

Equivalent
BD – CHROMagar Strep B, Modified

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HiCrome™ Media for Clinical Applications

Acinetobacter species

M1938 -- HiCrome™ Acinetobacter Agar Base

Chromogenic mixture imparts light purple colour to Acinetobacter (MDR)

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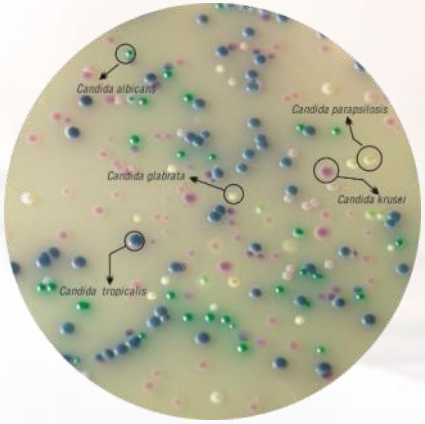
HiCrome™ Media for Clinical Applications

Target Organisms

- **Yeast and moulds**

M1297A/M1456A -- HiCrome™ Candida Differential Agar/ Base, Modified

M1297AR -- HiCrome™ Candida Differential Agar Base



Chromogenic mixture contains X-NAG which detects hexosaminidase activity and BCIP which detects phosphatase activity.

Selective supplement helps in inhibiting bacterial growth.

Candida albicans - light green smooth

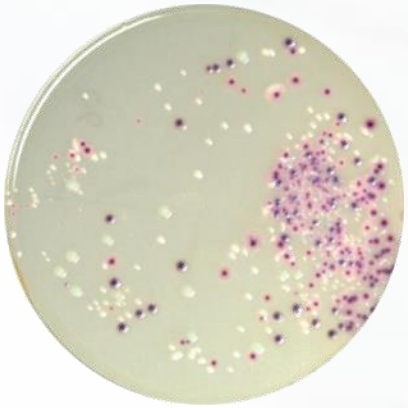
Candida tropicalis - blue - metallic blue raised

Candida krusei- pink -purple, fuzzy

Candida glabrata- cream to white

Candida kefyr - cream to white

Candida parapsilosis- cream to white (may have mauve centre)



Equivalent codes

BD - CHROMagar Candida

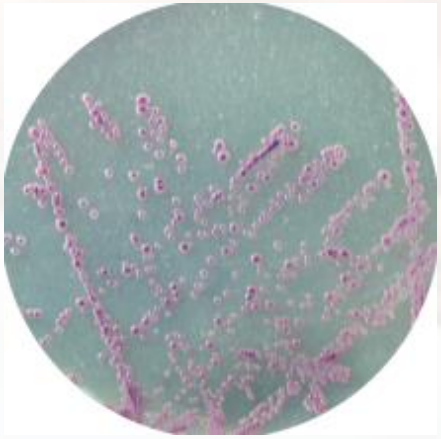
Oxoid – Brilliance Candida Agar

Remel – Chromogenic Candida Agar

HIMEDIA®

Target Organisms
Yeast and moulds

M1985 -- HiCrome™ Malassezia Agar (Twin Pack)



Tween 80, Glycerol monooleate and fatty acids supports luxuriant growth of *M.furfur*

Malessezia furfur – *mauve coloured small colonies*
Candida albicans - light green smooth
Candida tropicalis - blue - metallic blue raised

Equivalent Products
BD - CHROMagar Malasezzia

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HiCrome™ Media for Clinical Applications

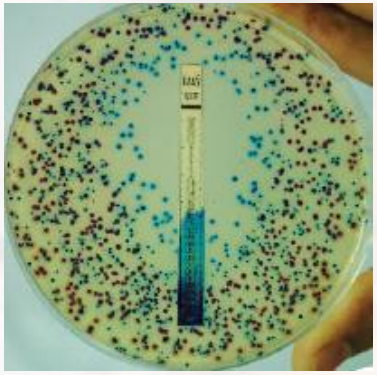
NEW

- Chromogenic Media for Antibiotic Susceptibility

M2010 -- HiCrome™ Mueller Hinton Agar

- Traditional method takes 48 hours for organism identification and antimicrobial susceptibility
- This medium gives rapid and reliable results in 24 hours
- Chromogenic differentiation of various Urinary Tract pathogens
- Simultaneous detection of Antimicrobial susceptibility. Can be employed in clinical testing of urinary tract infection

- *Escherichia coli* – Pink to purple
- *Enterobacter or Klebsiella* – Metallic blue
- *Enterococcus faecalis* - Blue,
- *Staphylococcus aureus* – Colourless to Golden yellow
- *Pseudomonas aeruginosa* – Greenish pigment
- *Proteus* species – Brown colouration
- Other yeasts- Colourless



Equivalent Products
CHROMagar Orientation

HiCrome™ Media for Food &Clinical Testing

Target Organisms

▪Salmonella species

M1078/M1082	–	Salmonella Differential Agar/ Modified (Twin Pack)
M1633/M1634	–	HiCrome™ Rajhans Medium/Modified
M1296/M1466	–	HiCrome™ Salmonella Agar/ HiCrome Improved Salmonella Agar
M1393/ M1816	–	HiCrome MM Agar / HiCrome MM Agar Modified
M1842	–	HiCrome Selective Salmonella Agar Base

▪*Vibrio* species

M1682	-	HiCrome™ Vibrio Agar

▪*Listeria* species

M1540	-	L.mono Differential Agar Base
M1924	-	HiCrome™ L.mono Rapid Differential Agar Base
M2009	-	HiCrome™ L.mono Differential Agar Base

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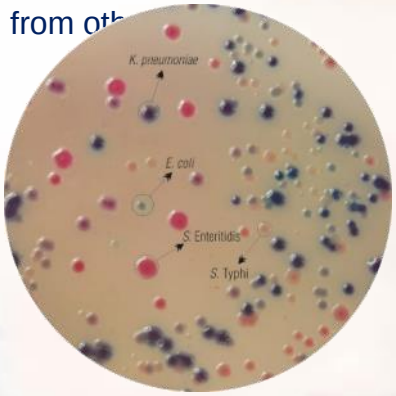
Salmonella species

M1078/M1082 – Salmonella Differential Agar/ Modified (Twin Pack)

Recommended for selective isolation and differentiation of *Salmonella* species from oth

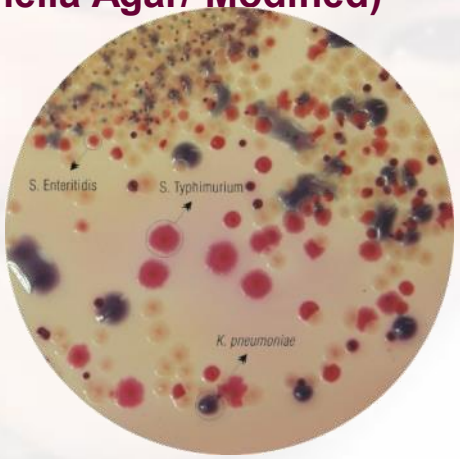


Enterobacteriaceae especially *Proteus* species from food and clinical specimens.
BC indicator to detect presence of b- galactosidase.
Novel property of acid production from propylene glycol by *Salmonella* is exploited
Lactose fermenting b- galactosidase positive organisms - blue-violet colonies
Salmonella species produces acid from propylene glycol and combines with BC indicator to give pink coloured colonies
Other *Enterobacteriaceae* – colourless
Sodium deoxycholate for selectivity - Gram positive bacteria inhibited

Equivalent Product : Rambach Agar – BD / Merck

M1633/M1634 - HiCrome™ Rajhans Medium / Modified (Salmonella Agar/ Modified)

Recommended for selective isolation and differentiation of *Salmonella* species from other *Enterobacteriaceae* especially *Proteus* species from food and clinical specimens.
Chromogenic mixture to detect presence of b- galactosidase.
Lactose fermenting b- galactosidase positive organisms
- light purple - blue-violet colonies
Lactose is the fermentable carbohydrate with neutral red as an indicator dye
Salmonella species gives pink coloured colonies
due to presence of chromogenic mixture
Other *Enterobacteriaceae* - colourless
Sodium deoxycholate for selectivity - Gram positive bacteria inhibited



Equivalent Product : Rambach Agar – BD / Merck/ Oxoid

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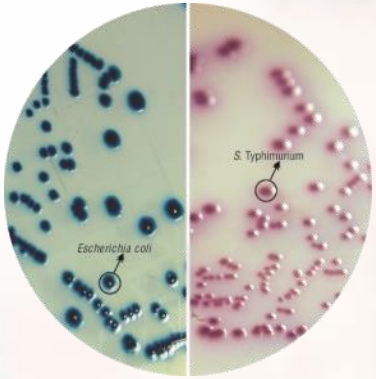
HiCrome™ Media for Food &Clinical Testing

M1296/M1466 HiCrome™ Salmonella Agar/ HiCrome™ Improved Salmonella Agar



Recommended for selective isolation and differentiation of *Salmonella* species from other *Enterobacteriaceae* especially *Proteus* species from food and clinical specimens.

Chromogenic mixture to detect presence of b- glucuronidase

Escherichia coli - blue colonies

Salmonella species gives light purple with halo (M1296) coloured or pink-red (M1466) coloured colonies due to presence of chromogenic mixture

Other *Enterobacteriaceae* - colourless

Bile salt mixture /Sodium deoxycholate - Gram positive bacteria inhibited

Equivalent Product : BD - CHROMagar Salmonella, Oxoid - Salmonella Chromogenic Agar Base

M1842 HiCrome™ Selective Salmonella Agar Base

Recommended for selective isolation and differentiation of *Salmonella* species from food samples

Chromogenic mixture to detect presence of b- glucuronidase

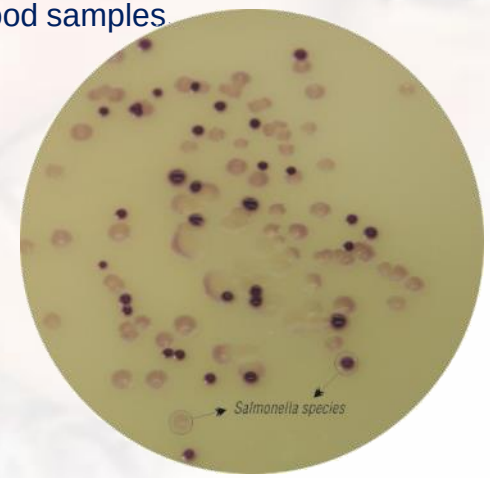
Klebsiella - blue colonies

Salmonella species gives purple coloured colonies due to presence of chromogenic mixture

Other *Enterobacteriaceae* - colourless

Sodium cholate, Sodium taurocholate and Sodium deoxycholate for selectivity - Gram positive bacteria inhibited

Equivalent Product : BD - CHROMagar Salmonella Plus, Oxoid – Brilliance Salmonella Agar Base



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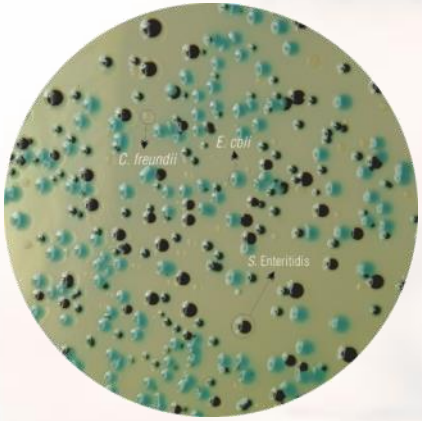
M1393 HiCrome™ MM Agar

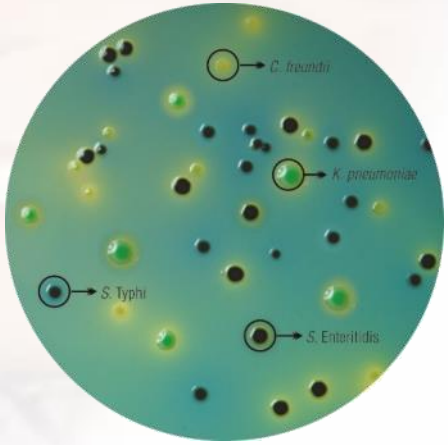
Recommended for selective isolation and differentiation of *Salmonella* species from food samples.



Chromogenic mixture to detect presence of b- glucuronidase
Presence of three sugars D-cellobiose, mannitol and trehalose which stimulates better growth.
Presence of lactose helps suppress H_2S production by non-Salmonella strains
E.coli - blue colonies
Salmonella species gives black centred colonies
Citrobacter - colourless (may show blue coloured on prolonged incubation)
Pseudomonas – colourless

M1816 HiCrome™ MM Agar Modified

Recommended for selective isolation and differentiation of *Salmonella* species from food samples.
Chromogenic mixture to detect presence of b- glucuronidase
Presence of three sugars D-cellobiose, sucrose and xylose which stimulates better growth.
Presence of lactose helps suppress H_2S production by non-Salmonella strains
BTB is indicator dye.
E.coli - bluish green colonies
Salmonella species gives black centred colonies
Citrobacter - yellow
Pseudomonas - colourless
Klebsiella pneumoniae -yellowish green



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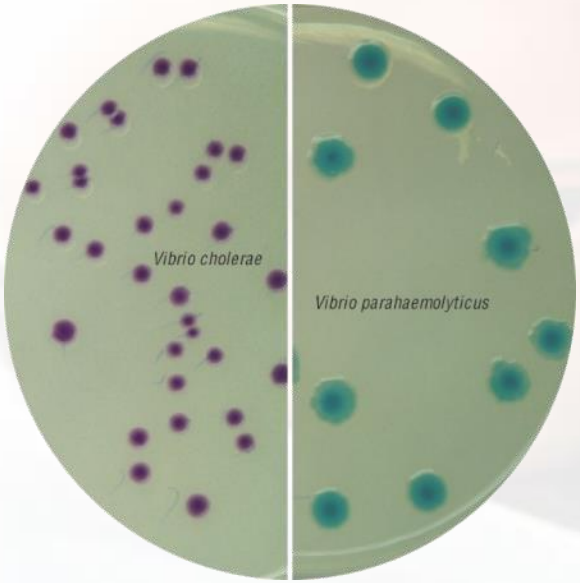
HiCrome™ Media for Food & Clinical Testing

M1682 - HiCrome™ Vibrio Agar



Chromogenic mixture to detect presence of b-galactosidase Easy & Rapid differentiation between *V.cholerae* and *V. parahaemolyticus* High salt concentration helps selective growth of *Vibrio*

Sodium thiosulphate, sodium citrate and sodium cholate- inhibits gram positive and gram negative

***Vibrio cholerae* - purple; *Vibrio parahaemolyticus*- green**

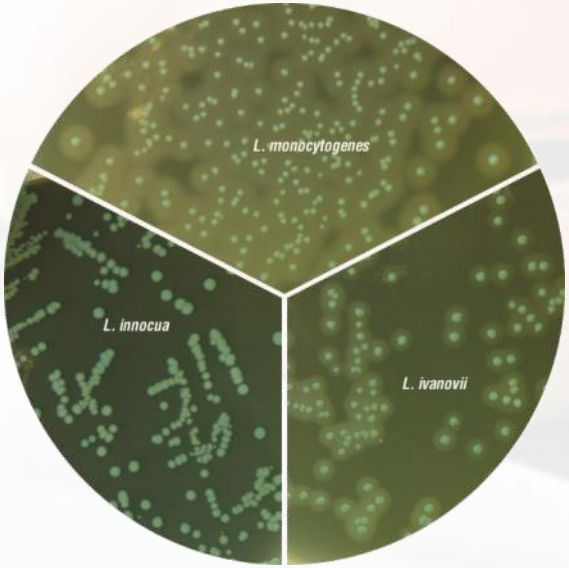
Equivalent Product :

CHROMagar Vibrio

HIMEDIA®

Listeria species

M1540 L.mono Differential Agar Base



Recommended for the selective and differential isolation of *Listeria monocytogenes* from food and animal feed.
Differentiation of *Listeria monocytogenes* from other *Listeria* species is based on phosphatidyl inositol specific phospholipase C (PIPLC) activity.
Phospholipase C enzyme hydrolyses the purified substrate (FD214) added to the medium resulting in an opaque halo around *Listeria monocytogenes* colonies.
L.monocytogenes – greenish blue w/ + PIPLC activity
L.ivanovii - greenish blue w/ + PIPLC activity
L.innocua - greenish blue w/ no PIPLC activity
Selective supplement - inhibits accompanying microflora

Equivalent Product
BD- CHROMagar ALOA
Merck Chromocult Listeria Selective Agar (ALOA))

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M1417F/M1417
HiCrome Listeria Agar Base/Modified

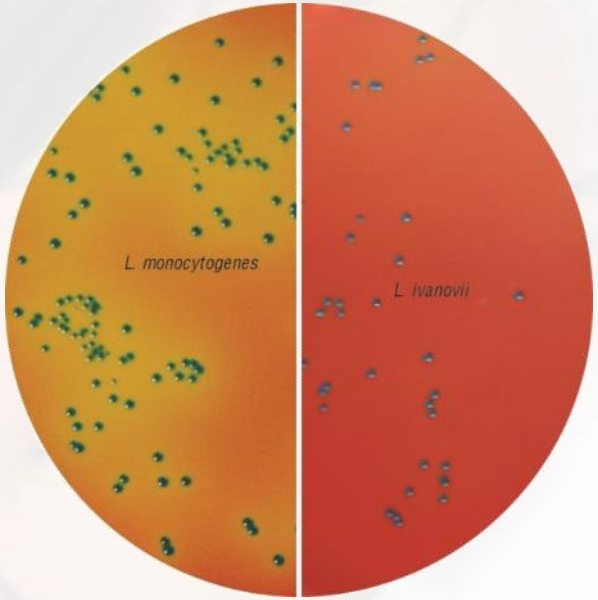
A selective and differential agar medium recommended for rapid and direct identification of *Listeria species* from food stuffs.
The composition of M1417F is in accordance with FDA BAM, 1998.
M1417 - **Rhamnose fermentation** while M1417F is based **on Xylose fermentation**.
Phenol red is the indicator dye.
Chromogenic mixture to detect ß -glucosidase activity, which is specific for *Listeria species* giving blue colored colonies.
Since other organisms cannot utilize the substrate, gives white colonies.

M1417

L.monocytogenes & *L.innocua* ferments rhamnose -bluish green w/yellow halo
L.ivanovii does not ferment rhamnose - bluish green

M1417F

L.ivanovii ferments xylose -bluish green w/yellow halo
L.monocytogenes and *L.innocua*
does not ferment xylose - bluish green



Lithium chloride and selective supplement - inhibits most gram positive and gram negative organisms, yeasts and moulds

Equivalent Product
CHROMagar Listeria

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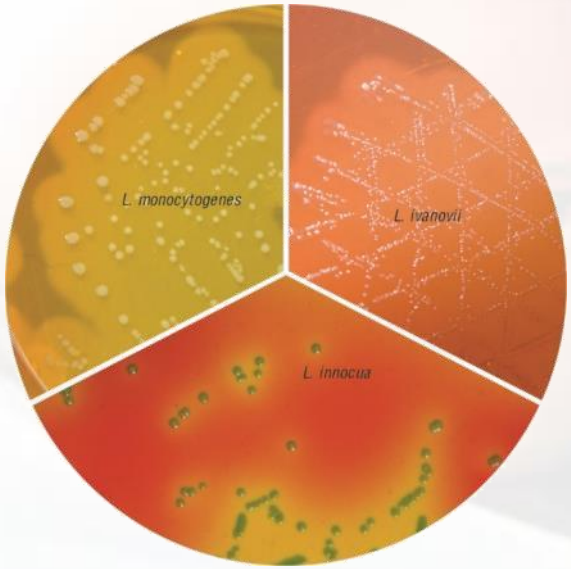
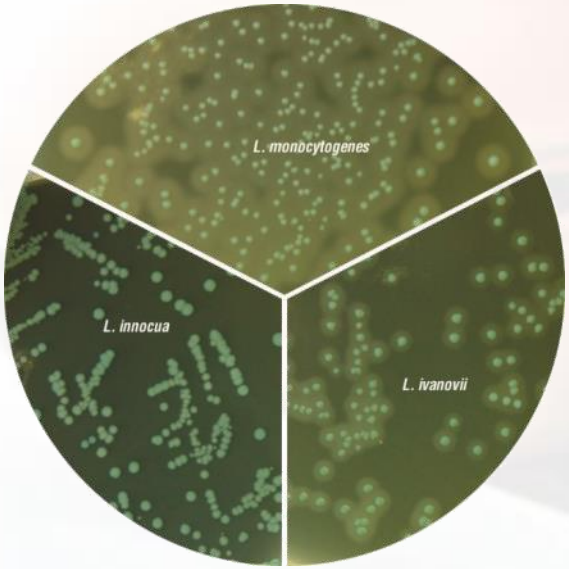
M1924 HiCrome L.mono Rapid Differential Agar Base



Recommended for the rapid identification and differentiation of *Listeria monocytogenes* from other *Listeria species* based on rhamnose fermentation + PIPLC activity from food samples.
Listeria species hydrolyse the purified chromogenic substrate ß-glucoside which is specific for *Listeria species*, giving blue coloured colonies.
other organisms gives white colonies.
Differentiation between *Listeria species* is based on the property of rhamnose fermentation and PIPLC activity, giving yellow halo for rhamnose fermentation.
L.monocytogenes – bluish green w/ yellow halo & + PIPLC activity
L.ivanovii - bluish green w/ + PIPLC activity
L.innocua - bluish green w/ yellow halo & + PIPLC activity
Other organisms - inhibited

Equivalent Product
BD – CHROMagar Listeria
Merck – Chromocult Listeria Selective Agar
Oxoid – Brilliance Listeria

M2009 HiCrome L.mono Differential Agar Base

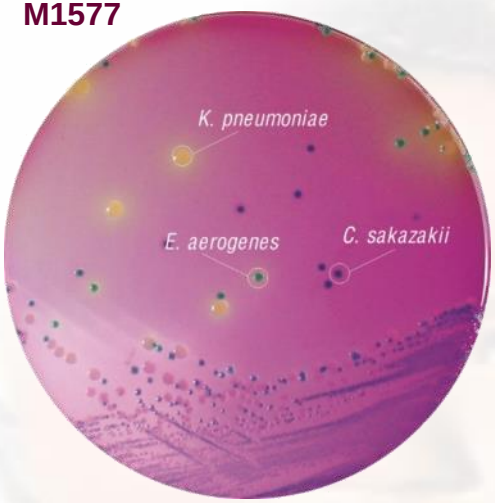


Recommended for the selective and differential isolation , enumeration and identification of *L.monocytogenes* & *Listeria species* - PCPLC activity .
It is based on, for the selective and differential isolation of *Listeria* species on the basis of utilization of chromogenic substrate , Phosphotidylcholine phospholipase C (PCPLC) exihibited by halo zone around the colonies.
L.monocytogenes – greenish blue w/ + PCPLC activity
L.ivanovii - greenish blue w/ + PCPLC activity
L.innocua - greenish blue w/ no PCPLC activity
Selective supplement - inhibits accompanying microflora

Equivalent code
Oxoid – Briliance Listeria Agar Base

Cronobacter sakazakii

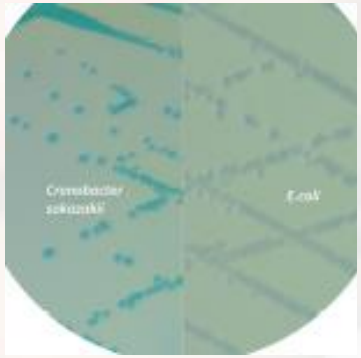
M1577 **HiCrome™ Enterobacter sakazakii Agar**



Recommended for selective isolation and detection of *Cronobacter sakazakii* from food, milk and dairy products.
Chromogenic mixture to detect presence of glucosidase
Escherichia coli - yellow
Enterobacter aerogenes - green
Cronobacter sakazakii - blue
Klebsiella pneumoniae - green
Sodium deoxycholate for selectivity - Gram positive bacteria inhibited

M1641 **HiCrome™ Enterobacter sakazakii Modified**

Recommended for selective isolation and detection of *Cronobacter sakazakii* from food, milk and dairy products.
Formulation is as per the specifications laid down in
ISO Draft ISO/TS 22964,2006 (E)
Mixture of chromogenic substance to detect of glucosidase
Escherichia coli - colourless with blue centre
Enterobacter aerogenes - colourless with blue centre
Cronobacter sakazakii - blue-green
Sodium deoxycholate for selectivity - Gram positive bacteria inhibited



Equivalent Product

BD- CHROMagar **E sakazakii**
Merck- Chromocult Enterobacter sakazakii Agar
Oxoid- Brilliance Enterobacter sakazakii Agar

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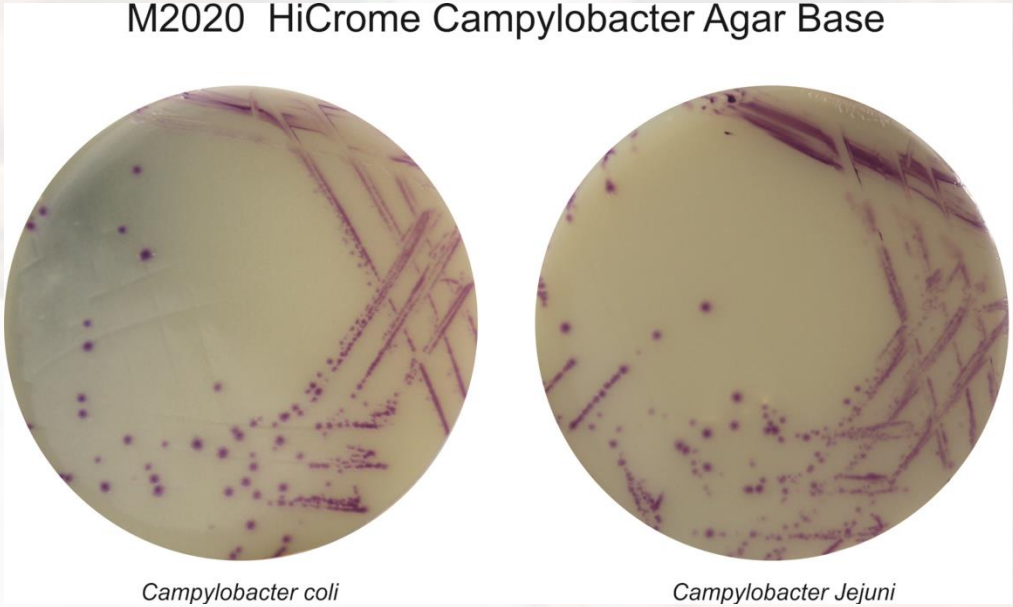
M2025 HiCrome Yersinia Agar Base

Selective for the isolation of **Yersinia** species from food and Clinical samples
Colour of the colony – purple
opaque background for better visibility

M2020 HiCrome Campylobacter Agar Base

Selective medium for the growth of *Campylobacter*
Chromogenic substrate is cleaved to yield mauve to purple coloured colonies
Opaque background for better visibility



HiCrome™ Media for Water Testing

Target Organisms

▪ *Escherichia coli* & Total coliforms

M1294	–	HiCrome™ ECC Selective Agar Base
M1300/M1832	–	HiCrome™ Coliform Agar w/ SLS/Modified
M1826	–	Coliform Broth w/ SLS

▪ Membrane filtration

M1951	-	HiCrome™ M-Coliform Differential Agar Base
M1426	-	M-E.coli Broth
M1571/M1713	-	HiCrome™ M-TEC Agar/ Broth
M1569	-	HiCrome™ M-Lauryl Sulphate Agar
M1991I	-	HiCrome™ Chromogenic Coliform Agar (CCA)

▪ Chromogenic & Fluorogenic

M1488	-	HiCrome™ ECD Agar w/ MUG
M1663	-	HiCrome™ PA Broth

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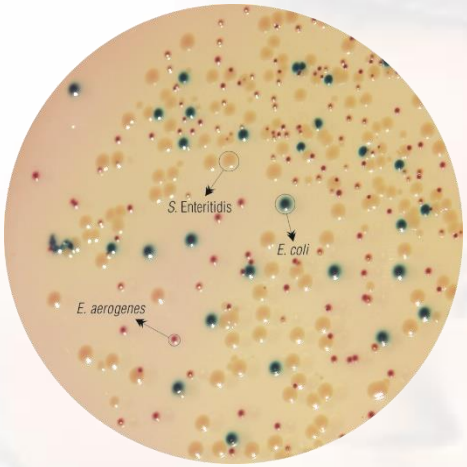
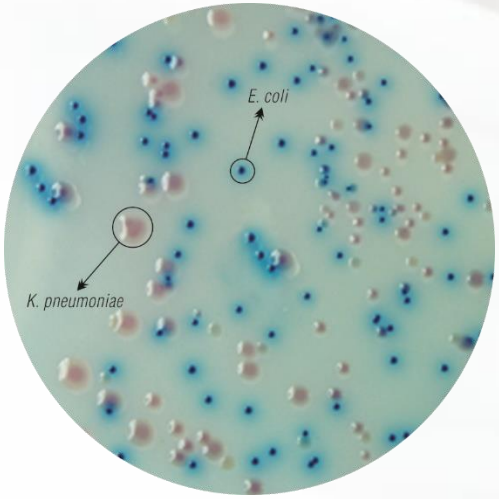
Escherichia coli & Total coliforms

M1294 HiCrome™ ECC Selective Agar Base



Recommended for presumptive identification of *Escherichia coli* and other coliforms in food and water samples.
Two chromogens to detect presence of glucuronidase and galactosidase enzymes
E.coli - dark blue to violet
L-Tryptophan added to improve indole detection
Other coliforms- Salmon to red
Tergitol 7 and Selective supplement for selectivity
Gram positive bacteria – inhibited

M1300/ M1832 HiCrome™ Coliform Agar w/SLS /Modified



Recommended for simultaneous detection of *Escherichia coli* and total coliforms in water , milk, dairy and food samples
Two chromogens to detect presence of glucuronidase and galactosidase enzymes
E.coli- dark blue to violet
L-Tryptophan added to improve indole detection
Other coliforms- Salmon to red
Salmonella /Shigella species - colourless
Sodium lauryl sulphate for selectivity -Gram positive bacteria inhibited

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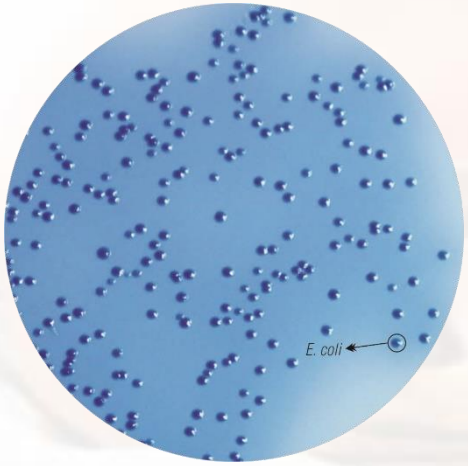
Escherichia coli & Total coliforms - Membrane filtration

M1951 **HiCrome™ M-Coliform Differential Agar Base**

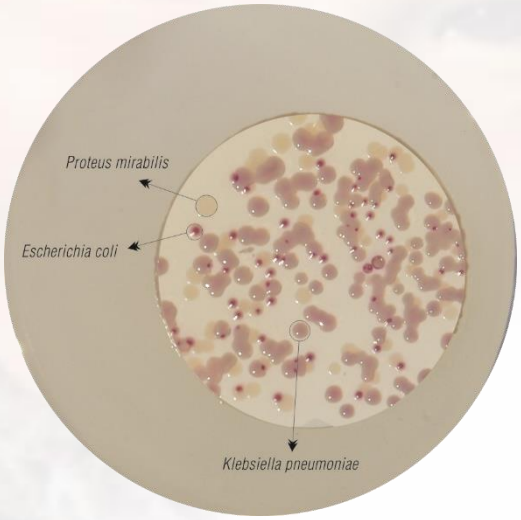


Recommended for simultaneous detection of *Escherichia coli* and total coliforms in water samples
Chromogenic substrate along with aniline blue - detects presence of glucuronidase enzyme
E.coli- blue
Proteus species - tan
Sodium deoxycholate and monensin for selectivity -Gram positive bacteria inhibited

M1571/M1713I **HiCrome™ M-TEC Agar / Broth**

Recommended by USEPA for differentiation and enumeration of thermotolerant *Escherichia coli* in water samples

Presence of chromogen to detect glucuronidase enzyme.
Lactose is the fermentable carbohydrate.
E.coli - purple/magenta
Klebsiella- colourless to tan
Proteus mirabilis - colourless to light brown
Sodium lauryl sulphate and sodium deoxycholate for selectivity
-Gram positive bacteria inhibited



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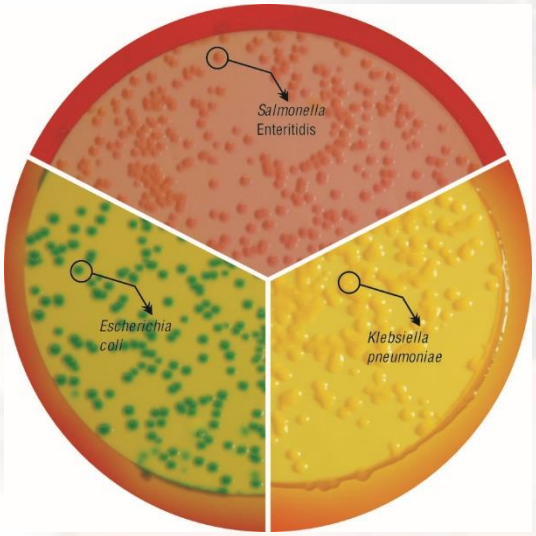
M1569

HiCrome™ M-Lauryl Sulphate Agar

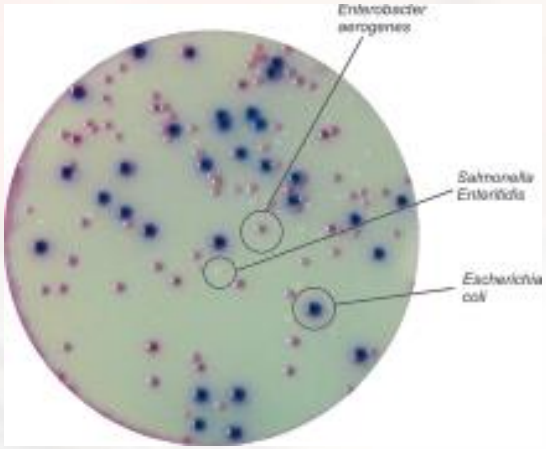


Recommended for simultaneous detection of *Escherichia coli* and total coliforms in water samples
Chromogenic substrate along with Lactose fermentation and phenol red indicator - detects presence of glucuronidase enzyme and differentiates between lactose fermentors & non- fermentors
E.coli - green
Lactose fermentors glucuronidase negative - yellow
Lactose non-fermentors - pink
Sodium lauryl sulphate -Gram positive bacteria inhibited

M1991I

HiCrome™ Chromogenic Coliform Agar

Recommended for simultaneous detection of *Escherichia coli* and total coliforms in water samples
Formulation is as per the specifications laid down in ISO 9308-1:2014
Mixture of three chromogens -galactosidase and glucuronidase enzymes.
IPTG is added to enhance colour detection.
E.coli - dark blue -violet
L-Tryptophan - improved indole reaction
Other coliforms- pink to red
Pseudomonas - colourless
Tergitol-7 for selectivity -Gram positive bacteria inhibited



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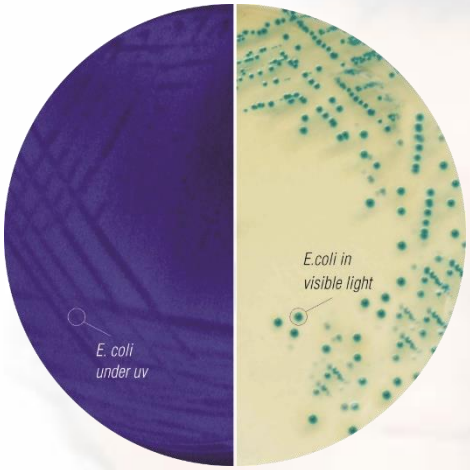
Chromogenic & Fluorogenic

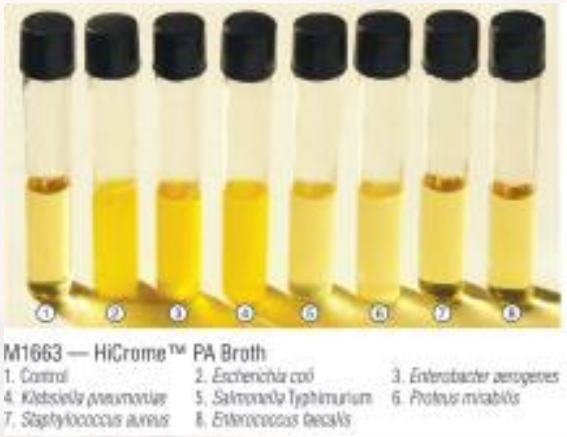
M1488 - HiCrome™ ECD Agar w/ MUG



Recommended for detection of presence or absence of *Escherichia coli* and total coliform in water samples
Presence of chromogenic substrate to detect presence of b-glucuronidase and MUG to detect b-glucuronidase.
E.coli - blue positive b-glucuronidase and positive fluorescence under uv
Other coliforms- colorless negative b-glucuronidase and negative fluorescence under uv Bile salts mixture for selectivity- Gram positive bacteria inhibited

M1663 - HiCrome™ PA Broth

Presence of ONPG to detect presence or absence of b-galactosidase enzyme and MUG to detect b- glucuronidase enzyme.
Lactose is the fermentable carbohydrate.
E.coli - yellow colour positive ONPG and positive fluorescence
ONPG Negative - no yellow colour
MUG Positive - Fluorescence under uv at 366nm
MUG Negative - No fluorescence under uv at 366nm
Bile salts mixture -Gram positive bacteria inhibited


M1663 — HiCrome™ PA Broth
1. Control 2. *Escherichia coli* 3. *Enterobacter aerogenes*
4. *Klebsiella pneumoniae* 5. *Salmonella Typhimurium* 6. *Proteus mirabilis*
7. *Staphylococcus aureus* 8. *Enterococcus faecalis*

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HiCrome™ Media for Food & Environmental Testing

Target Organisms

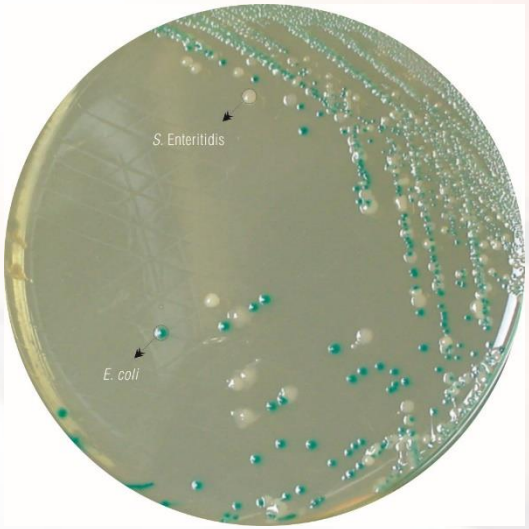
- ***Escherichia coli* & Total coliforms**

M1293	-	HiCrome™ ECC Agar
M1294	-	HiCrome™ ECC Selective Agar Base
M1300/M1832	-	HiCrome™ Coliform Agar w/SLS/Modified
M1295/M1295I	-	HiCrome™ E.coli Agar
M1488	-	HiCrome™ ECD Agar w/ MUG

- ***EC0157:H7***

M1340	-	HiCrome™ MacConkey Sorbitol Agar Base
M1574A/M1575A	-	HiCrome™ EC0157:H7 Agar, Modified/ Base, Modified
M1598	-	HiCrome™ Enrichment Broth Base for EC0157:H7
M1862	-	HiCrome™ M-Modified EC0157:H7 Selective Agar Base

M1295/M1295I HiCrome™ E.coli Agar

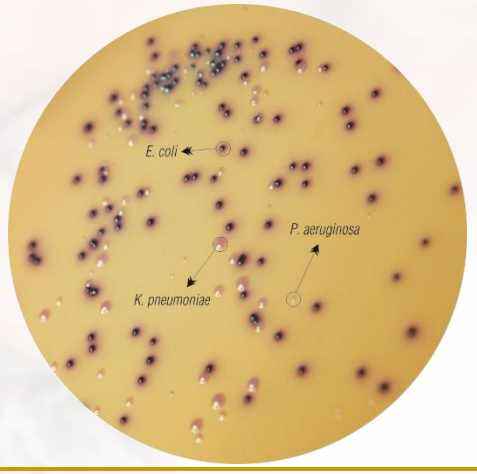


Recommended for detection and enumeration of *Escherichia coli*
M1295I
Formulation is as per the specifications laid down in ISO 166492:1999
Presence of X-glucuronide to detect glucuronidase enzyme.
E.coli - blue
Others - colourless
Bile salts mixture for selectivity -Gram positive bacteria inhibited

Equivalent Products

BD - CHROMagar E.coli/ CHROMagar TBX
Merck - Chromocult TBX Agar
Oxoid- Tryptone Bile X-Glucuronide Agar

M1293 - HiCrome™ ECC Agar



Recommended for presumptive identification of *Escherichia coli* and other coliforms in food and environmental samples.
Two chromogens to detect presence of glucuronidase and galactosidase enzymes
E.coli - blue to purple
Other coliforms - rose-pink
Pseudomonas- colourless

Equivalent Products

BD - CHROMagar ECC
Oxoid- Brilliance E.coli Coliform Agar

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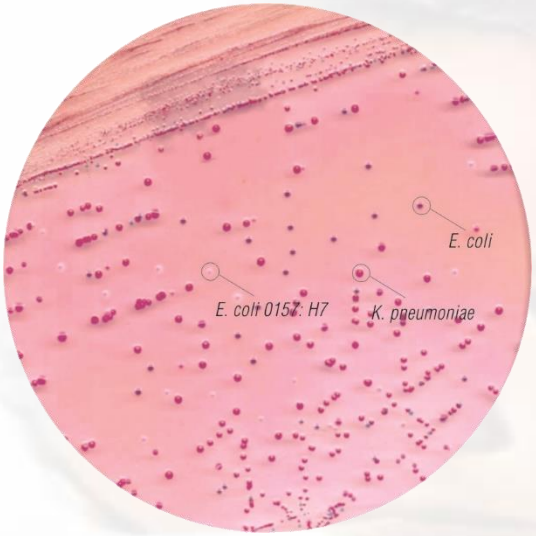
EC0157:H7

M1340 - HiCrome™ MacConkey Sorbitol Agar Base



Recommended for selective isolation of *Escherichia coli* O157:H7 from food and animal feeding stuff

Presence of BC Indicator to detect glucuronidase enzyme. Sorbitol is the fermentable carbohydrate.

E.coli - blue-green

Escherichia coli O157:H7 - colourless

Proteus mirabilis - colourless to light brown

Sodium lauryl sulphate & sodium deoxycholate -Gram positive bacteria inhibited

Equivalent Products

BD - CHROMagar E.coli/ CHROMagar TBX

Merck - Chromocult TBX Agar

Oxoid- Tryptone Bile X-Glucuronide Agar

M1862 - HiCrome™ M-Modified EC0157:H7 Selective Agar Base

Recommended for selective differentiation of *Escherichia coli* O157:H7 from food samples by membrane filtration technique

Mixture of chromogenic substance to detect beta- glucuronidase, lysine decarboxylase and sorbitol fermentation

E.coli - green

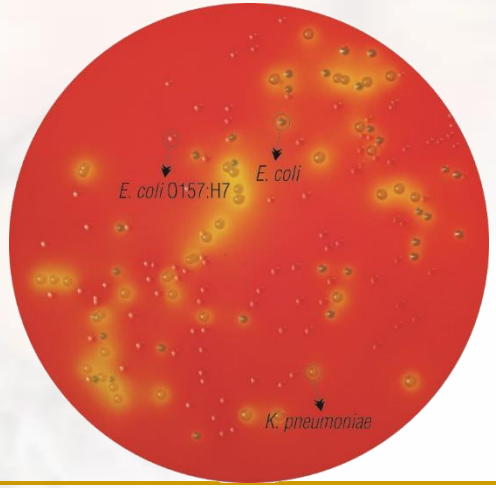
Escherichia coli O157:H7 - pink

Klebsiella pneumoniae - yellow

Salmonella Enteritidis- light green may show slight precipitation

Shigella - colourless

Sodium deoxycholate & selective supplement - Gram positive bacteria inhibited



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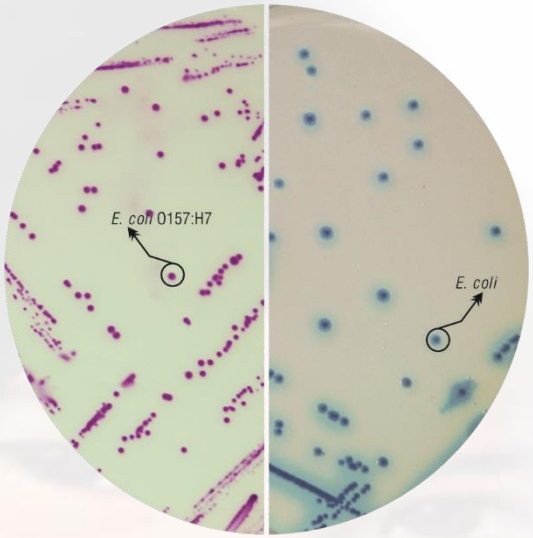
EC0157:H7

M1574A **HiCrome™ EC0157:H7 Agar, Modified**



Recommended for selective isolation of *Escherichia coli* O157:H7 from food and environmental samples
Mixture of chromogenic substance to differentiate between *E.coli* and *E.coli* 0157:H7
Sorbitol is the fermentable carbohydrate.
E.coli - blue-green
Escherichia coli O157:H7 - dark purple -magenta
Klebsiella - blue, mucoid
Pseudomonas - colourless
Proteus mirabilis - colourless to light brown
Sodium lauryl sulphate and bile salt mixture for selectivity – Gram positive bacteria inhibited
FD052 - inhibits *Aeromonas* and *Providencia* species

Equivalent Products
BD - CHROMagar E.coli 0157

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HiCrome™ Media for Water Testing

Target Organisms

M1850	-	HiCrome™ Broth Modified
M1465/M1453	–	Rapid HiCrome™ Agar/ Broth

- ***Enterococci***

M1414/M1376	-	HiCrome™ Enterococci Agar/ Broth
M1580	-	HiCrome™ Enterococcus faecium Agar Base

- ***Clostridium* species**

M1354	-	M-CP Agar Base

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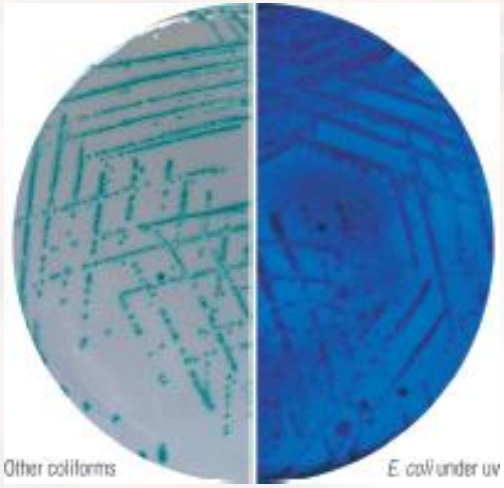
HiCrome™ Media for Water Testing

M1850 - HiColiform™ Broth Modified

Recommended for detection of presence and absence of *Escherichia coli* and total coliform in water samples
Presence of chromogenic substrate to detect presence of b-galactosidase and MUG to detect b-glucuronidase.
E.coli - blue positive b-galactosidase and positive fluorescence under uv
Other coliforms - blue positive b-galactosidase and negative fluorescence under uv
Sodium lauryl sulphate for selectivity -Gram positive bacteria inhibited

M1465/M1453 Rapid HiColiform™ Agar/Broth



Recommended for detection of presence of *Escherichia coli* and total coliform
Presence of chromogenic substrate to detect presence of
b-galactosidase and MUG to detect b-glucuronidase
E.coli - blue positive b-galactosidase and positive fluorescence under uv
Other coliforms - blue positive b-galactosidase & -ve fluorescence under uv
Confirmation of *E.coli* - Indole positive on addition of Kovacs reagent
Sodium lauryl sulphate for selectivity – Gram positive bacteria inhibited

Equivalent Product
BD- AquaCHROM ECC
Merck- Fluorocult LMX Broth Modified

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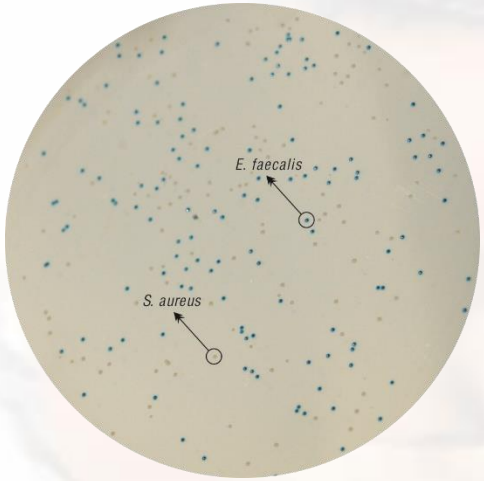
Enterococci

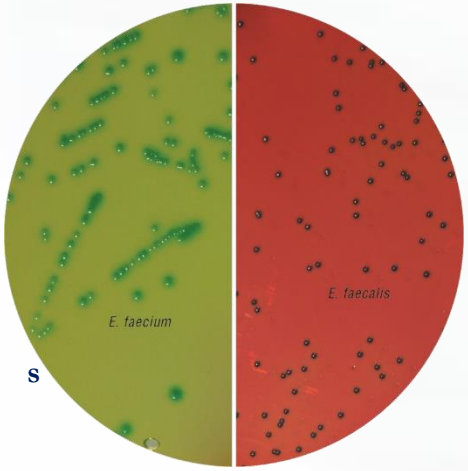
M1414/M1376 - HiCrome™ Enterococci Agar/ Broth



Chromogenic substrate detects b-glucosidase, imparts blue green colour to *Enterococcus* species
Sodium azide - inhibits accompanying microflora especially gram negative organisms

EQUIVALENT Product
BD – Aquachrom Enterococcus
Merck – Chromocult Enterococci Broth / Agar

M1580 - HiCrome™ Enterococcus faecium Agar Base



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Chromogenic substrate detects b-glucosidase, imparts blue green colour to *Enterococcus* species
Sodium azide - inhibits accompanying microflora especially gram negative organism
Presence of Arabinose and phenol red to differentiate between Enterococcus faecalis (blue) and Enterococcus faecium (green with yellow background)

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Clostridium species

M1354- **M-CP Agar Base**

Recommended by the Directive of the Council of the European Union 98/83/EC for the isolation and enumeration of *Clostridium* species from water sample by membrane filtration
Indoxyl-b-D- glucoside detects -b-D- glucosidase or cellobiase
Phenolpthalein phosphate detects acid phosphatase on exposure to ammonia fumes
Bromo cresol purple is indicator dye and sucrose is fermentable carbohydrate
Selective supplement - inhibits other accompanying microflora
Cl. perfringens - yellow which turns old rose-rose pink on exposure to ammonia fumes

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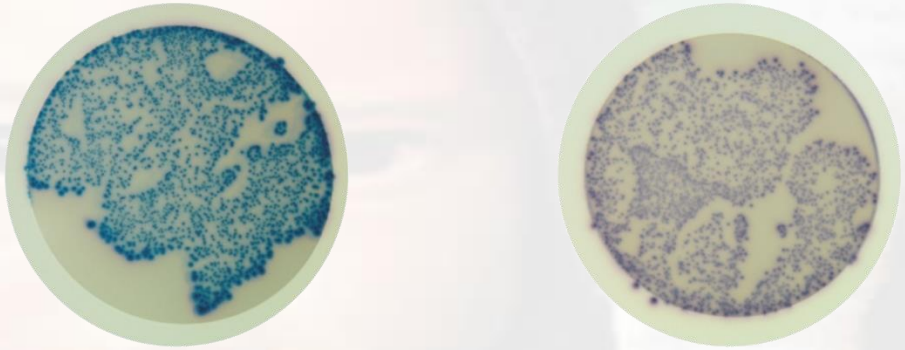
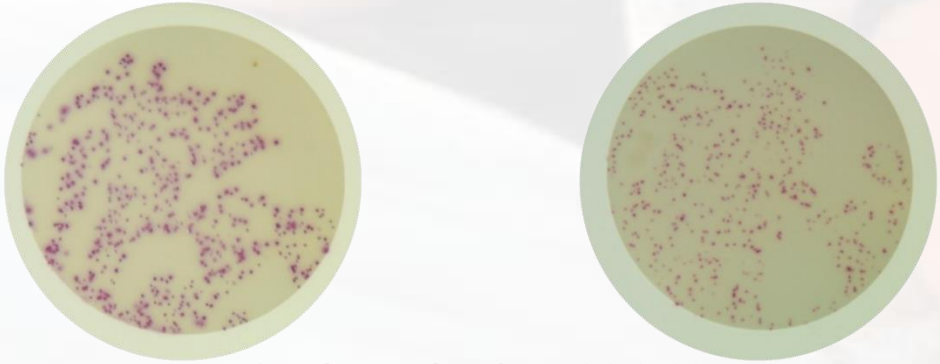
M1991I - : HiCrome Chromogenic Coliform Agar

HiMedia **Merck**

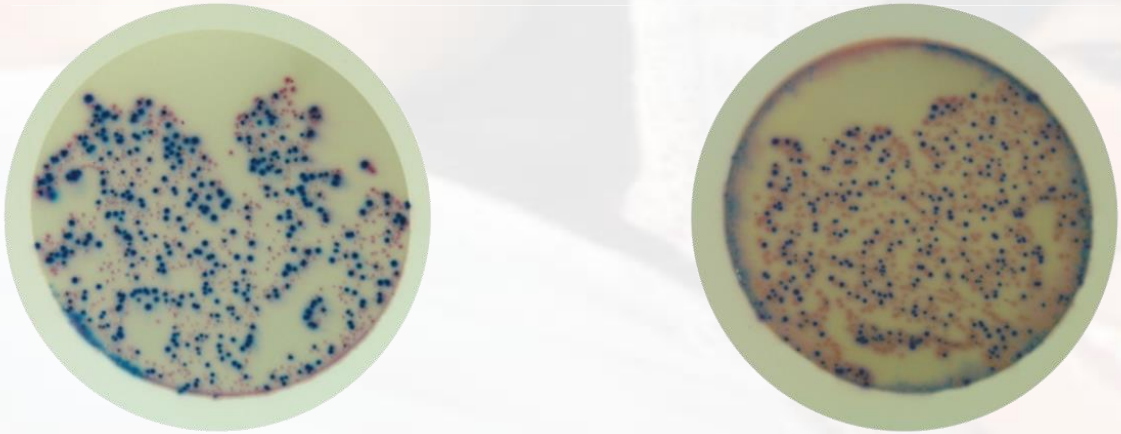


Escherichia coli ATCC 25922



Citrobacter frundii ATCC 8090

Salmonella Enteritidis ATCC 13076



Mixture of *Escherichia coli* & other coliforms

Thank You

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