

Hardy**CHROM**TM

Chromogenic Culture Media



 **HARDY**
DIAGNOSTICS
A Culture of ServiceTM

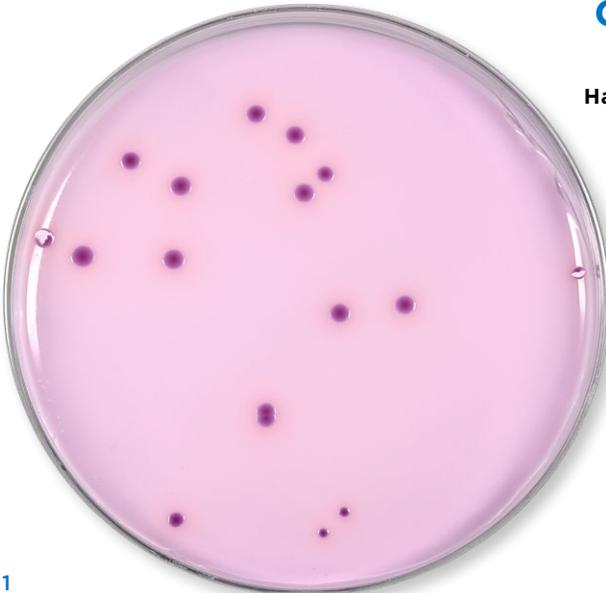
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For use in Clinical,
Environmental,
Food, and
Veterinary
laboratories

HardyCHROM™ Bcc

15x100mm plate, 10/pk, Cat. no. G335

For selective isolation and differentiation of *Burkholderia cepacia*, and other closely related species, based on colony color.



Color Read-Out Interpretation

HardyCHROM™ Bcc is highly selective for *B. cepacia* and 28 other Bcc strains, including *B. cenocepacia* and *B. multivorans*.

HardyCHROM™ Bcc is inhibitory for *P. aeruginosa*.



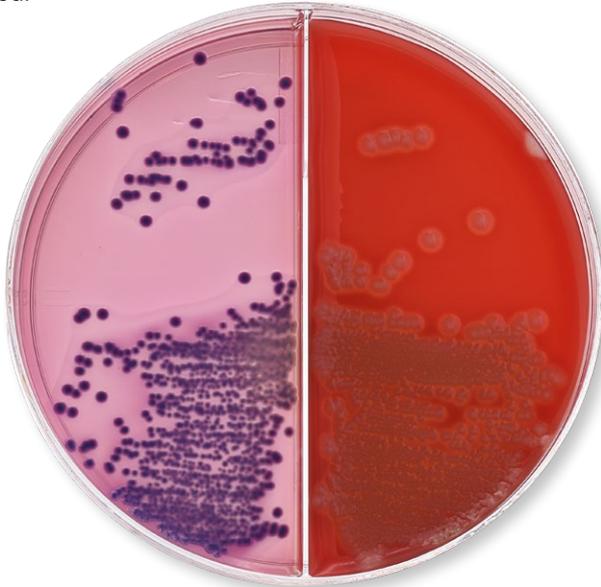
Burkholderia cepacia

HardyCHROM™ BluEcoli™ Biplate

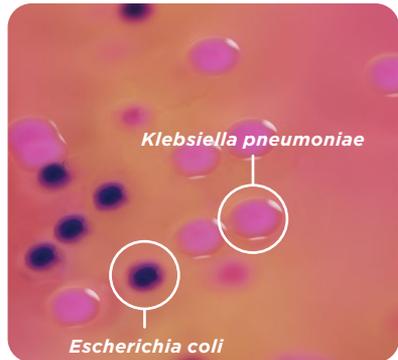
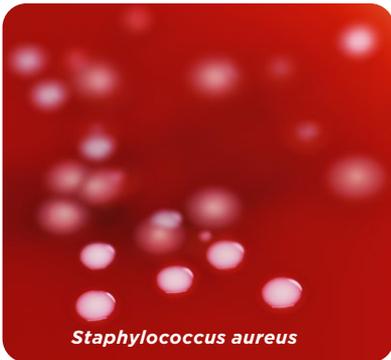
15x100mm biplate, 10/pk, Cat. no. J123

A urine culture medium consisting of Blood Agar on one side and BluEcoli™ Agar on the other side, which is used for the isolation of urinary pathogens and for the identification of *Escherichia coli*.

This revolutionary agar plate economically screens urine specimens for *E.coli*. Since 80-90% of all positive urine cultures are *E. coli*, the **BluEcoli™ Urine Biplate** is a fast, easy, and cost effective way of identifying the majority of UTIs.¹ Now you can identify *E. coli* based on colony color with no further testing needed!



Color Read-Out Interpretation

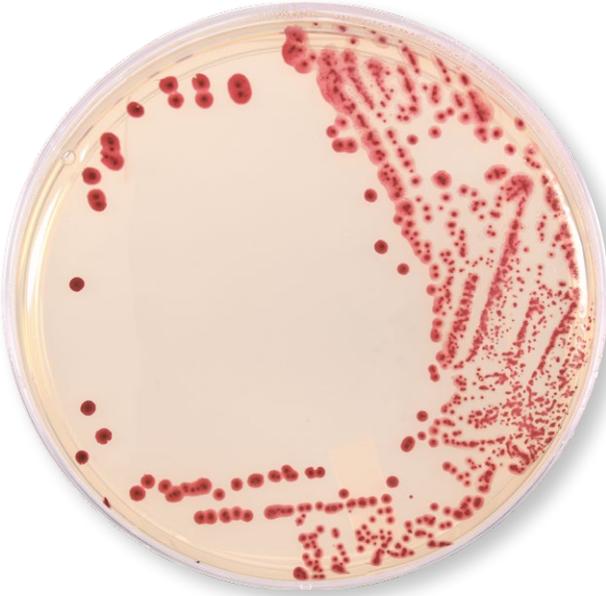


¹Kodaka et al., Journal of Clinical Microbiology, Jan. 1995, p.199-201.

HardyCHROM™ Campy

15x100mm plate, 10/pk, Cat. no. G339

Recommended as a screening medium for the selective isolation and chromogenic differentiation of *Campylobacter* spp. from direct stool cultures or from food or poultry samples.

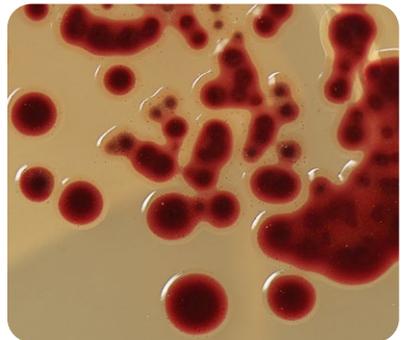


Color Read-Out Interpretation

- *Campylobacter* forms red colonies on a translucent background, making detection easy.
- Selects for *Campylobacter* species from mixed samples, especially *C. jejuni*, *C. lari*, *C. coli*, and *C. fetus*.



Campylobacter jejuni

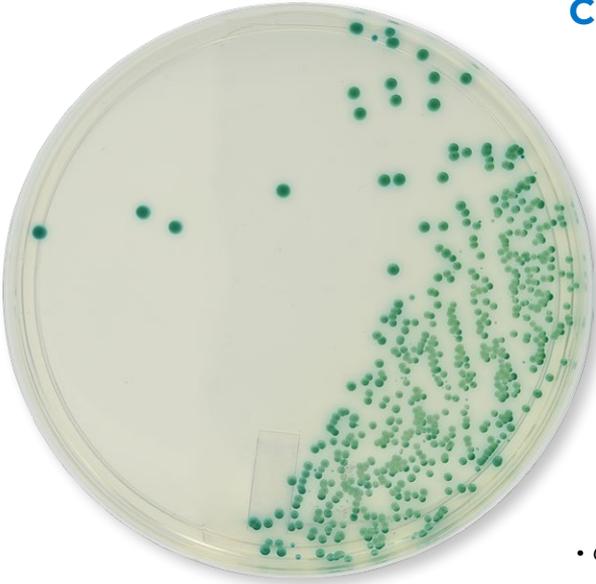


Campylobacter coli

HardyCHROM™ Candida

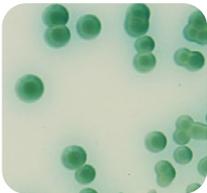
15x100mm plate, 10/pk, Cat. no. G301

HardyCHROM™ Candida utilizes on chromogenic substances to reveal specific enzymes for species identification by color. Due to the unique colors produced, no further testing is needed to identify *C. albicans*, *C. tropicalis*, and *C. krusei*. A trehalose test is needed to confirm *C. glabrata*.



Color Read-Out Interpretation

- *C. albicans* produces smooth, medium green to dark metallic green colonies.
- *C. tropicalis* colonies appear medium blue to dark metallic blue with a blue halo.
- *C. glabrata* produces smooth, pink colonies, often with a darker mauve center. Further testing, such as Rapid Trehalose Fermentation Broth (Cat. no. Z205) is needed for confirmation.
- *C. krusei* produces rough, spreading, pink colonies.



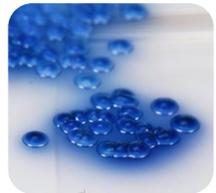
Candida albicans



Candida krusei



Candida glabrata



Candida tropicalis

Dehydrated Culture Media Also Available

CRITERION™ HardyCHROM™ Candida

Mylar® zip-bag to make 2L, Cat. no. C9000

500gm wide-mouth bottle, Cat. no. C9001

2kg bucket, Cat. no. C9002

10kg bucket, Cat. no. C9003



HardyCHROM™

Candida + auris

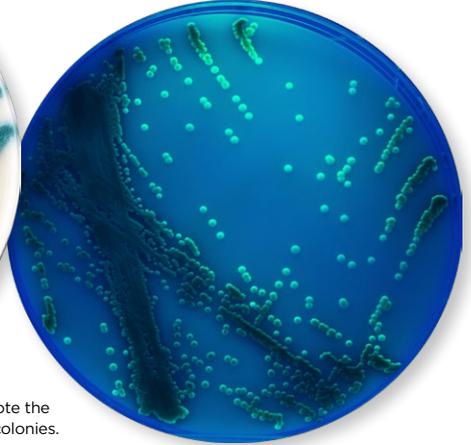
15x100mm plate, 10/pk, Cat. no. G343

Recommended for the selective isolation and differential identification of *Candida* species. Colonies of *C. auris* will appear white with a characteristic teal to teal-green “bullseye” center and show a unique fluorogenic reaction under UV light at 48-72 hours.

This medium also allows for the differentiation of *C. tropicalis*, *C. albicans* and *C. krusei*, and can aid in the identification of *C. glabrata* when used in conjunction with Rapid Trehalose Broth or GlabrataQuick™. All colonies suspected of *C. auris* should be subjected to confirmatory methods such as MALDI.



Candida auris under UV light at 48 hours.



Candida auris at 48 hours under visible ambient light. Note the white perimeter and teal colored center of the isolated colonies.

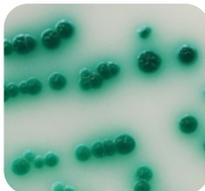
Color Read-Out Interpretation

This medium also allows for the differentiation of *C. tropicalis*, *C. albicans* and *C. krusei*, and can aid in the identification of *C. glabrata* when used in conjunction with Rapid Trehalose Broth or GlabrataQuick™.

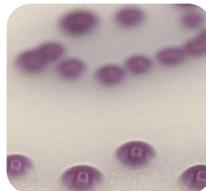
- *C. tropicalis* colonies appear medium blue to dark metallic blue with a blue halo.
- *C. albicans* produces a smooth, medium to green dark metallic green colonies.
- *C. glabrata* produces smooth, pink colonies, often with a darker mauve center.
- *C. krusei* produces rough, spreading, pink colonies.



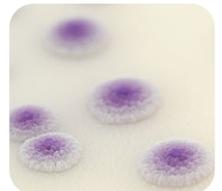
Candida tropicalis



Candida albicans



Candida glabrata



Candida krusei

HardyCHROM™ CRE

15x100mm plate, 10/pk, Cat. no. G323

A selective and differential chromogenic agar medium intended for the qualitative and presumptive detection of *Escherichia coli* and KES* that are non-susceptible to carbapenems from stool specimens.

FDA cleared.

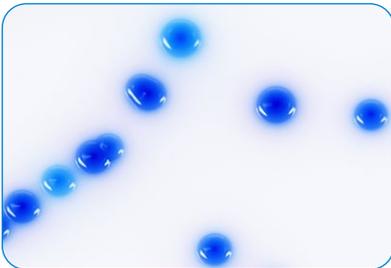


Color Read-Out Interpretation

KES produce large, dark blue colonies (with or without pink halos) and are presumptive positive for carbapenem non-susceptible KES (*Klebsiella aerogenes*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Enterobacter cloacae* complex, and *Serratia marcescens*).

Non-susceptible *E. coli* produces colonies that are pink to magenta in color.

Colonies that are not pink to magenta, blue, or blue with pink halos are negative. No carbapenem non-susceptible *Escherichia coli* or KES detected.



Klebsiella pneumoniae

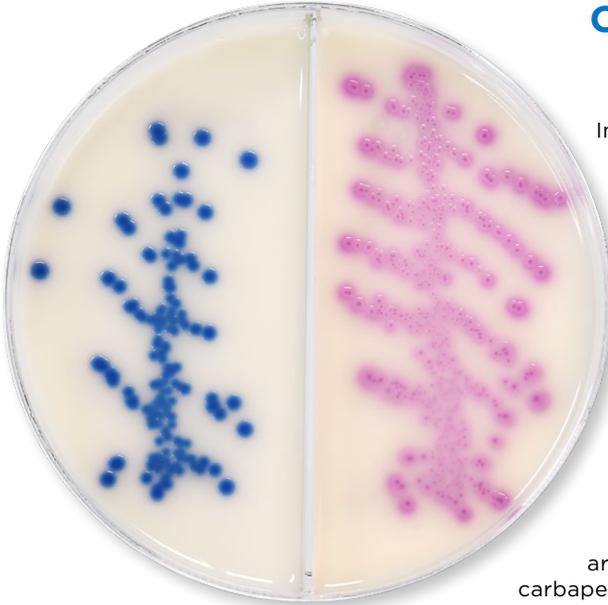


Escherichia coli

HardyCHROM™ CRE/ESBL Biplate

15x100mm biplate, 10/pk, Cat. no. J28

Intended to aid in the detection and identification of **CRE** and **ESBL**. The unique chromogenic properties in **HardyCHROM™ CRE/ESBL** allows for bright, distinct color read-outs.



Color Read-Out Interpretation

CRE

Intended for the qualitative and presumptive detection of *Escherichia coli* and KES (*Klebsiella aerogenes*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Enterobacter cloacae* complex, and *Serratia marcescens*) that are non-susceptible to carbapenems from stool, rectal swabs and related specimens.

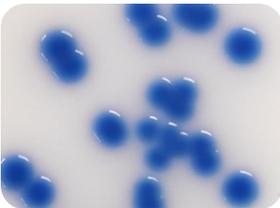
KES produce large, dark blue colonies (with or without pink halos) and are presumptive positive for carbapenem non-susceptible KES.

Non-susceptible *E. coli* produces colonies that are pink to magenta in color.

Colonies that are not pink to magenta, blue or blue with pink halos are negative. No carbapenem non-susceptible *Escherichia coli* or KES detected.

ESBL

Intended for the qualitative and presumptive detection from stool specimens of: Enterobacterales that are potentially non-susceptible to ceftazidime and cefpodoxime and extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli*, *Klebsiella pneumoniae* and *Klebsiella oxytoca*. Growth can appear as early as 18 hours of incubation. *Escherichia coli* will produce pink to magenta colonies, *Proteus mirabilis* will produce yellow or gold colonies, and *Klebsiella pneumoniae* will produce blue to purple colonies with or without a pink halo.



Klebsiella pneumoniae



Escherichia coli



Proteus mirabilis

HardyCHROM™ ECC

15x100mm plate, 10/pk, Cat. no. G303

HardyCHROM™ ECC is a chromogenic media recommended for the detection, differentiation, and enumeration of *Escherichia coli* and other coliforms in food, water, or environmental samples based on colony color.



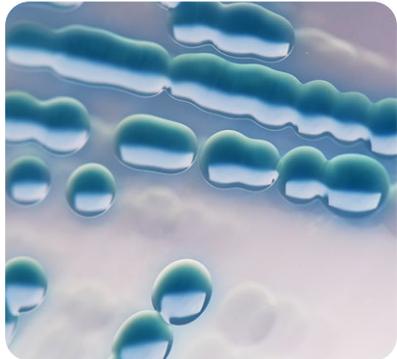
Color Read-Out Interpretation

Escherichia coli colonies growing on HardyCHROM™ ECC. Incubated aerobically for 24 hours at 35°C. Growth; smooth pink to violet colonies.

Klebsiella pneumoniae colonies growing on HardyCHROM™ ECC. Incubated aerobically for 24 hours at 35°C. Growth; smooth turquoise colonies.



Escherichia coli



Klebsiella pneumoniae

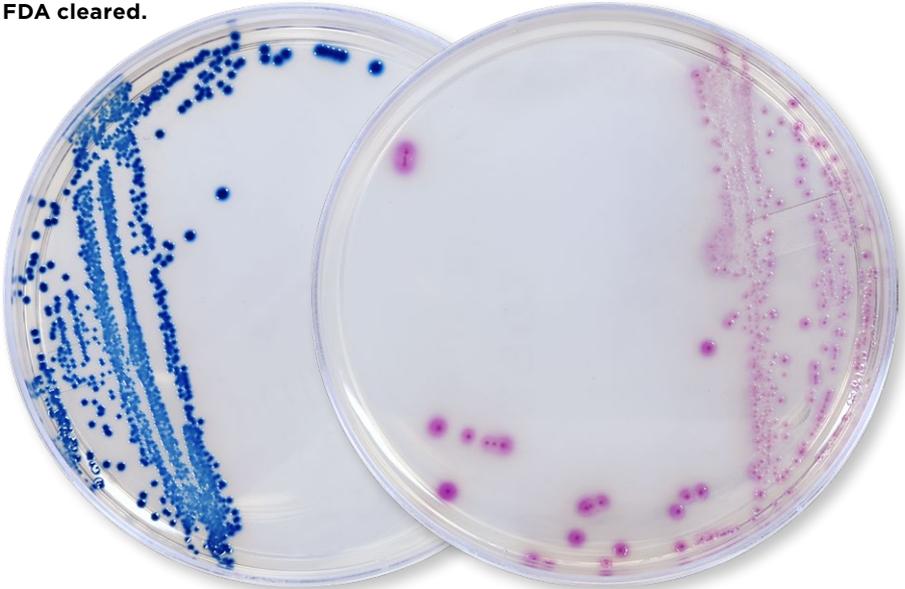
HardyCHROM™ ESBL

15x100mm plate, 10/pk, Cat. no. G321

HardyCHROM™ ESBL is a selective and differential chromogenic medium which is intended for the qualitative and presumptive detection from stool specimens of:

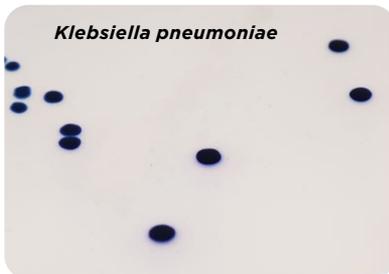
- Enterobacteriales that are potentially non-susceptible to ceftazidime and cefepodoxime.
- Extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli*, *Klebsiella pneumoniae* and *Klebsiella oxytoca*.

FDA cleared.

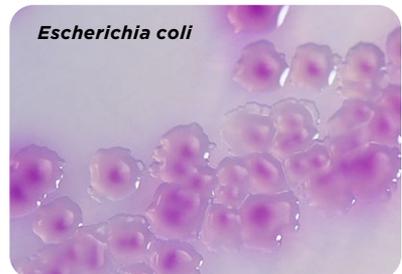


Color Read-Out Interpretation

Growth can appear as early as 18 hours after inoculation. *Escherichia coli* will produce pink to magenta colonies, *Proteus mirabilis* will produce yellow or gold colonies and *Klebsiella pneumoniae* produce blue to purple colonies with or without a pink halo.



Klebsiella pneumoniae



Escherichia coli

*HardyCHROM™ ESBL is not intended to diagnose ESBL infection nor to guide or monitor therapy for ESBL infections. Further testing using approved methods is necessary for identification, susceptibility testing, or epidemiological typing.

HardyCHROM™ Group A Strep

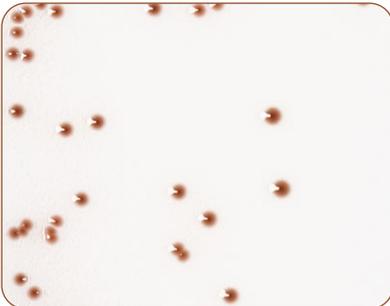
15x100mm plate, 10/pk, Cat. no. G337

This easy to read chromogenic medium is recommended for the selective cultivation and differential isolation of Group A *Streptococcus* (*S. pyogenes*). Colonies are identified based on color (red, red-brown, or red-orange colonies) among the other non-GAS bacteria in the complex throat flora (blue, clear or white colonies) after 24 hours of incubation.

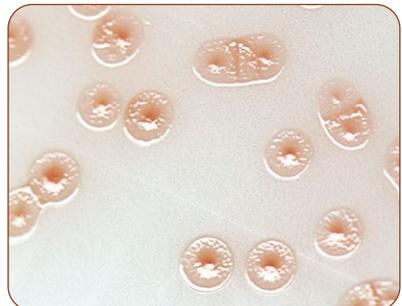


Color Read-Out Interpretation

- *Streptococcus pyogenes* red-brown colonies growing on HardyCHROM™ Group A Strep agar. Incubated in CO₂ for 24 hours at 35°C.
- *Streptococcus pyogenes* (clinical strain) red-orange colonies growing on HardyCHROM™ Group A Strep agar. Incubated in CO₂ for 24 hours at 35°C.



Streptococcus pyogenes



***Streptococcus pyogenes* (clinical strain)**

HardyCHROM™ HurBi™ Biplate

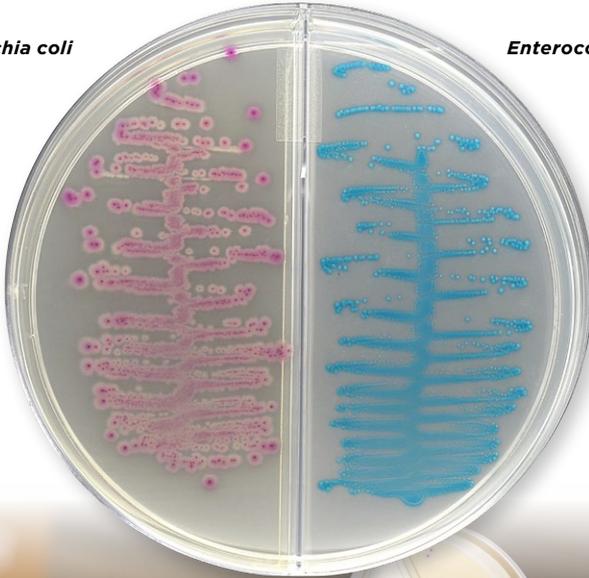
15x100mm plate, 10/pk, Cat. no. J100

Recommended for the cultivation, differentiation and enumeration of various gram-negative and gram-positive bacteria, and yeast based on colony color and morphology. This biplate reduces the need for expensive automated ID cards.

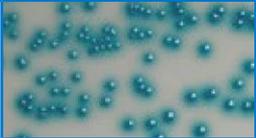
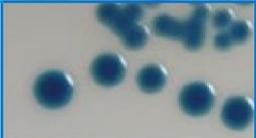
Selective agents have been added to the each side of the biplate to select for growth of gram-positive organisms and yeast on one side and to select for growth of gram-negative organisms on the other side of the biplate. Distinct color reactions for each of the common urinary tract pathogens make it easier to detect mixed infections.

Escherichia coli

Enterococcus faecalis



Color Read-Out Interpretation

<i>Staphylococcus aureus</i>	Opaque, cream to white colored colonies	
<i>Staphylococcus saprophyticus</i>	Opaque, pink colonies	
<i>Enterococcus</i> spp.	Teal to turquoise colonies	
<i>Candida albicans</i> , <i>Candida krusei</i> , <i>Candida tropicalis</i> , and <i>Candida glabrata</i>	Small, opaque, white, moist colonies (<i>C. krusei</i> will be a rough colony)	
<i>E. coli</i>	Rose to magenta colonies with darker pink centers	
<i>Klebsiella</i> , <i>Enterobacter</i> , and <i>Serratia</i> spp.	Deep blue or dark indigo colonies	
<i>Citrobacter</i> spp.	Dark blue colonies often with a rose halo in the surrounding media	
<i>Proteus</i> , <i>Morganella</i> , and <i>Providencia</i> spp.	Clear to light yellow colonies with golden-orange halo in the surrounding media (some <i>Proteus vulgaris</i> colonies will be blue-green)	
<i>Pseudomonas</i> spp.	Colorless to light yellow-green colonies	

HardyCHROM™ Listeria

15x100mm plate, 10/pk, Cat. no. G317

HardyCHROM™ Listeria is a chromogenic medium recommended for the selective isolation, differentiation, and enumeration of *Listeria monocytogenes* from food and environmental samples by colony color and appearance. *L. monocytogenes* colonies will turn turquoise with a distinctive white halo.

Features

- Modified and improved ALOA formula.
- Differentiates *L. monocytogenes* and *L. ivanovii* from other *Listeria* species.
- *L. monocytogenes* colonies turn turquoise with a white halo for easy read-out.
- Results as early as 24 hours.



Color Read-Out Interpretation

The presence of smooth, round, turquoise colonies 1-1.5mm in diameter surrounded by an opaque white halo is a presumptive positive test for the presence of *L. monocytogenes*/*L. ivanovii*. Further testing should be done to differentiate *L. monocytogenes* from *L. ivanovii* such as hemolysis, CAMP, rhamnose, xylose or other AOAC-RI approved methods. Colonies which appear colorless or turquoise without halos should be interpreted as negative for *L. monocytogenes*/*L. ivanovii*.



HardyCHROM™ MRSA

15x100mm plate, 10/pk, Cat. no. G307

HardyCHROM™ MRSA is a selective and differential chromogenic medium that facilitates the isolation and identification of methicillin-resistant *Staphylococcus aureus* (MRSA) to aid in the prevention and control of MRSA infections in health care settings. The test is performed on anterior nares swabs from patients and healthcare workers to screen for MRSA colonization.

FDA cleared.



Color Read-Out Interpretation

This chromogenic medium simplifies the detection of MRSA. MRSA produce pink to magenta colonies. Color development is bright, distinct and easy-to-read.

Methicillin-resistant *Staphylococcus aureus* colonies grown aerobically within 24 hours.



Staphylococcus aureus

*HardyCHROM™ MRSA is not intended to diagnose MRSA infection nor to guide or monitor therapy for MRSA infections. Further testing using approved methods is necessary for susceptibility testing or epidemiological typing.

Also Available

HardyCHROM™ MRSA with Reduced Stacking Ring

For use in automated sample processing systems.

15x100mm plate, 10/pk, Cat. no. GA307

LokTight™ HardyCHROM™ MRSA

15x65mm contact plate (for environmental screening),
10/pk, Cat. no. P14

HardyCHROM™ MRSA/Staph aureus

15x100mm biplate, 10/pk, Cat. no. J35

HardyCHROM™ O157

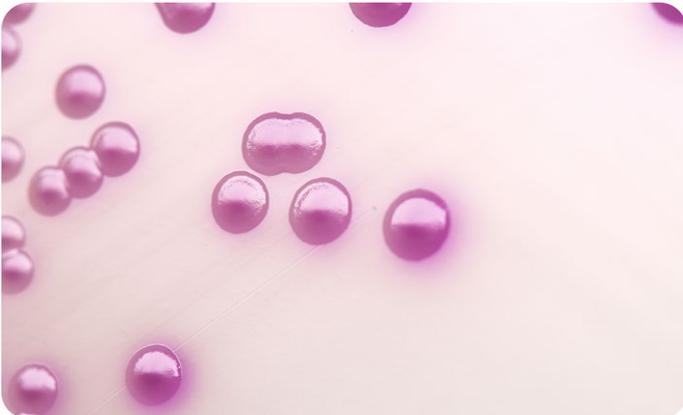
15x100mm plate, 10/pk, Cat. no. G305

A selective and differential medium recommended for the isolation of enterohemorrhagic *E. coli* O157 from food and environmental sources. Chromogenic substances in the media facilitate detection by colony color.



Color Read-Out Interpretation

E. coli O157 produce purple-pink colored colonies on the plate. Organisms other than *E. coli* O157 will be inhibited, or appear as blue colonies.



Escherichia coli

HardyCHROM™ Sakazakii

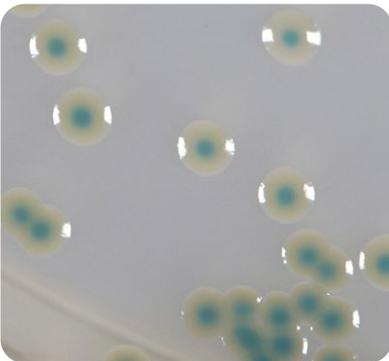
15x100mm plate, 10/pk, Cat. no. G315

Recommended for the selective isolation and differentiation of *Cronobacter* (*Enterobacter*) *sakazakii* from other members of the Enterobacterales family based on colony color.



Color Read-Out Interpretation

- *C. sakazakii* produces smooth, blue-green colonies on **HardyCHROM™ Sakazakii** as a result of unique bacterial enzyme interactions with chromogenic substances.
- Other members of the family Enterobacterales will produce white or colorless colonies with or without black centers.
- All gram-positive bacteria and yeast will be inhibited on this medium.



C. sakazakii



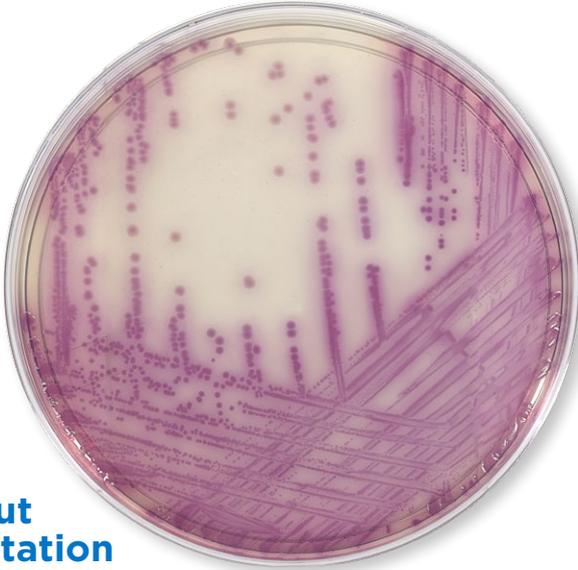
***Salmonella* spp.**

HardyCHROM™ Salmonella

15x100mm plate, 10/pk, Cat. no. G309

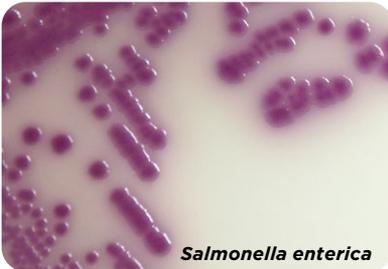
HardyCHROM™ Salmonella is a differential medium that facilitates the isolation and differentiation of *Salmonella* spp. from other members of the Enterobacterales.

This medium utilizes the ability of *Salmonella* spp. to produce acid from propylene glycol. This characteristic is used in conjunction with a chromogenic indicator to differentiate *Salmonella* spp. from *Proteus* spp. and other Enterobacterales.

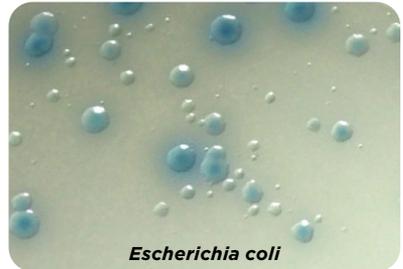


Color Read-Out Interpretation

- *Salmonella* spp., including *S. Typhi* and *S. Paratyphi A*, produce magenta colored colonies. Other members of the
- Enterobacterales (if present) produce blue, blue-green, white, or colorless colonies. Gram-positive bacteria and non-glucose fermenting bacteria will be inhibited.



Salmonella enterica



Escherichia coli

Also Available

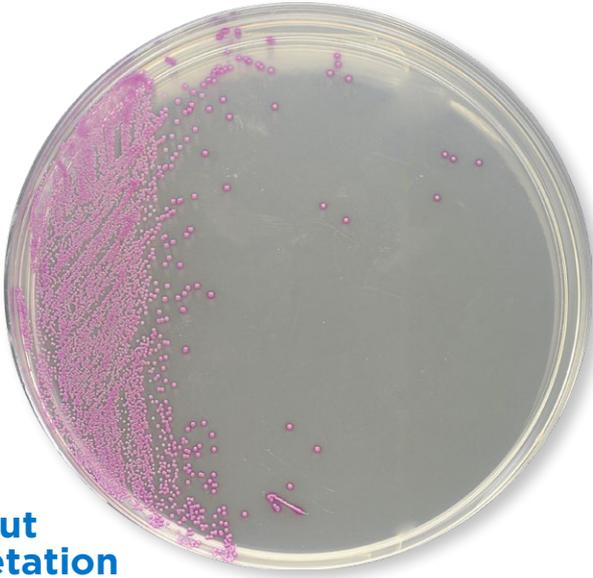
HardyCHROM™ Salmonella/XLT-4 (Xylose-Lysine-Tergitol 4)

15x100mm biplate, 10/pk, Cat. no. J37

HardyCHROM™ Staph aureus

15x100mm plate, 10/pk, Cat. no. G311

HardyCHROM™ Staph aureus allows for the rapid and reliable detection of *Staphylococcus aureus*. This medium contains a special chromogenic mix that allows for the isolation and differentiation of *Staphylococcus* spp.



Color Read-Out Interpretation

- *Staphylococcus aureus* can be identified as smooth, deep pink to fuchsia colored colonies on the plate
- Other organisms may appear as colorless, blue, turquoise, or cream colonies, or will be inhibited. *Staphylococcus epidermidis* will be partially to completely inhibited
- *Staphylococcus saprophyticus* will appear as turquoise colored colonies. Some gram-positive organisms other than *S. aureus* may appear as blue colonies



Staphylococcus aureus



Staphylococcus saprophyticus

HardyCHROM™ SS NoPRO™

15x100mm plate, 10/pk, Cat. no. G327

HardyCHROM™ SS NoPRO (no-*Proteus*) agar is recommended for the selective isolation and differentiation of *Salmonella* and *Shigella* spp. from stool.

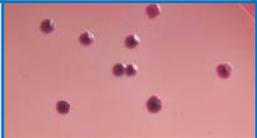
HardyCHROM™ SS NoPRO agar is intended as a primary screening tool to distinguish *Salmonella* and *Shigella* spp. from non-pathogenic enteric bacteria based on colony color, while inhibiting the growth and characteristic swarming of *Proteus* spp. The patented enhanced inhibition of *Proteus* reduces the expense involved in working up non-pathogens that could mimic enteric pathogens. Further species confirmation of suspect colonies via conventional or automated methods is recommended. This chromogenic medium for *Salmonella* and *Shigella* is both sensitive and specific without needless work-ups for no-*Proteus*.

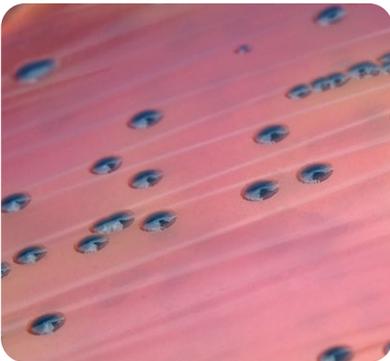


Color Read-Out Interpretation

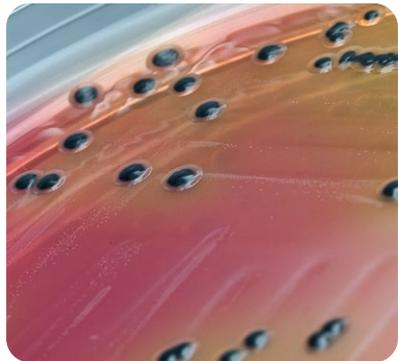
Most *Salmonella* serovar will produce H₂S and the colonies will have a large black center with clear perimeter. *Salmonella* that do not produce H₂S and *Shigella* spp. produce teal blue colored colonies.

S. dysenteriae may produce small, colorless colonies. Further species confirmation of suspect colonies via conventional or automated method is recommended. Teal color development may not be apparent at 18 hours of incubation in rare instances. Plates should be incubated a full 24 hours before being discarded as negative. Other members of the Enterobacterales, if present, will produce:

H ₂ S producing <i>Salmonella</i> spp.	Colonies with large black centers with clear perimeter	
<i>Shigella</i> spp. and non- H ₂ S producing <i>Salmonella</i> spp.	Teal blue colored colonies	
<i>Escherichia</i> spp., <i>Klebsiella</i> spp., <i>Citrobacter</i> spp., <i>Yersinia</i> spp., <i>Enterobacter</i> spp.	Pink colonies, with or without purple centers	
<i>Hafnia alvei</i> and inactive <i>E. coli</i> (Alkalescens - Dispar)	Small, blue colonies	



Shigella sonnei



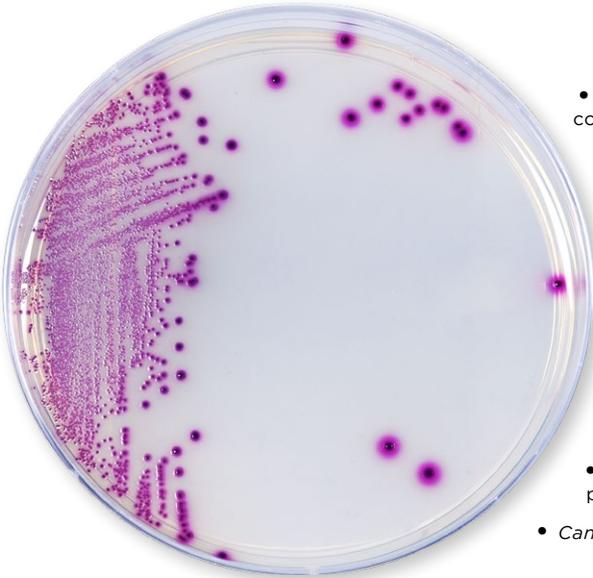
Salmonella

HardyCHROM™ UTI

15x100mm plate, 10/pk, Cat. no. G313

HardyCHROM™ UTI is a chromogenic culture medium that facilitates the isolation and differentiation of urinary tract pathogens. The development of various colors, due to chromogenic substances in the medium, allows for the differentiation of multiple microorganisms from the primary set-up of a urine specimen.

The most frequently isolated species from urinary tract infections (UTI) produce characteristic enzymes. Thus, **HardyCHROM™ UTI** can be used for the cultivation and differentiation of various groups of organisms with only a minimum number of confirmatory tests.



Color Read-Out Interpretation

- *E. coli* produces large magenta colonies (confirmatory, no further testing required).
- *Enterococcus* spp. produces small, turquoise-colored colonies. No further testing is needed.
- *Pseudomonas* spp. produce colorless to light yellow/green, translucent colonies.
- *Klebsiella*, *Enterobacter*, and *Serratia* spp. produce large, deep blue colonies.
- *Staphylococcus saprophyticus* produces opaque, pink colonies.
- *Candida* spp. produces small, white colonies.
- *Proteus*, *Morganella*, and *Providencia* spp. produce clear to light yellow colonies with a diffuse golden-orange halo in the medium.
- *Staphylococcus aureus* produces opaque, white-colored colonies.
- *Citrobacter* spp. produce dark blue colonies, often with a rose halo in the surrounding media.



Pseudomonas aeruginosa



Klebsiella pneumoniae

Also Available

HardyCHROM™ UTI/Blood Agar

15x100mm biplate, 10/pk, Cat. no. J119



HardyCHROM™ Vibrio

15x100mm plate, 10/pk, Cat. no. G319

HardyCHROM™ Vibrio is recommended for use as a selective and differential growth medium for the cultivation, isolation, and differentiation of *Vibrio* spp. from food and environmental samples.

HardyCHROM™ Vibrio differentiates *V. cholerae*, *V. parahaemolyticus*, and *V. vulnificus* from other *Vibrio* species based on colony color and fluorescence.

Color Read-Out Interpretation

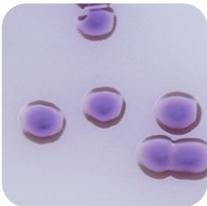
Vibrio parahaemolyticus produces colonies that are turquoise.

Vibrio cholerae produces colonies that are magenta to purple and do not fluoresce under UV light (365nm).

Vibrio vulnificus produces colonies that are magenta and do fluoresce under UV light (365nm).

Vibrio alginolyticus and other *Vibrio* spp. produce colonies that are colorless to olive.

Enterococcus faecalis may grow on **HardyCHROM™ Vibrio**, but colonies appear sky blue.



Vibrio cholerae



Vibrio vulnificus



Vibrio parahaemolyticus



Vibrio alginolyticus

Dehydrated Culture Media Also Available

CRITERION™ HardyCHROM™ Vibrio

Mylar® zip-bag to make 2L, Cat. no. C9010

500gm wide-mouth bottle, Cat. no. C9011

2kg bucket, Cat. no. C9012

10kg bucket, Cat. no. C9013



Hardy **CHROM**TM

Chromogenic Culture Media



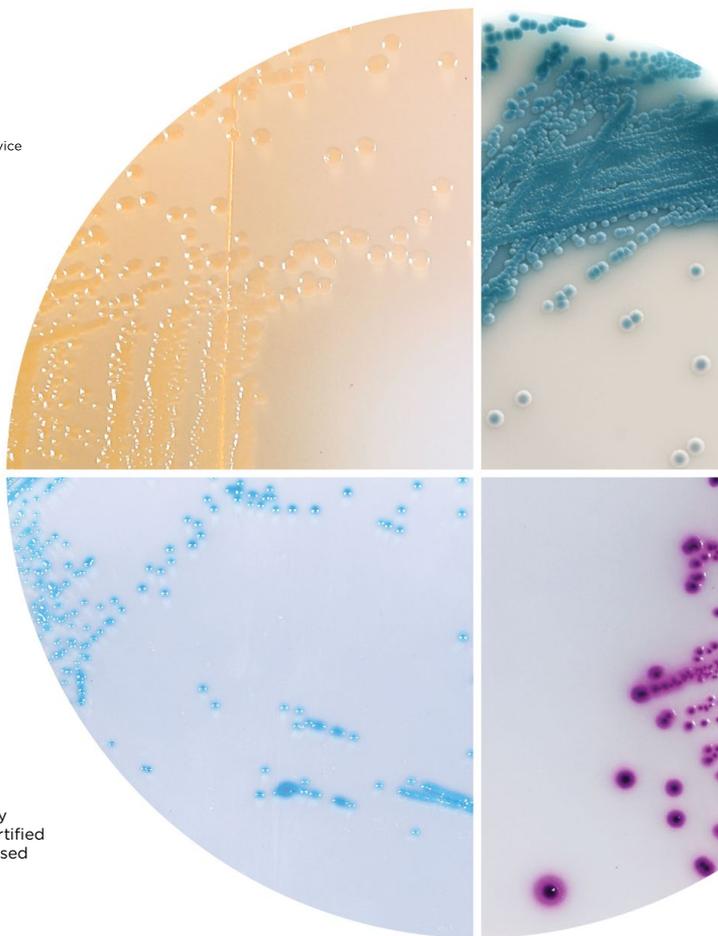
Hardy Diagnostics has a Quality Management System that is certified to ISO 13485 and is a FDA licensed medical device manufacturer.

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