“Color is my day-long obsession, joy, and torment.” - Claude Monet
Please note that the color interpretations in this guide are intended to be used exclusively for Hardy Diagnostics’ chromogenic products. Color development in chromogenic media from other manufacturers will vary. Complete product information and procedures can be accessed from the catalog at www.HardyDiagnostics.com.
BluEcoli™ Urine Biplate positive with *Escherichia coli*.

BluEcoli™ Urine Biplate inoculated with *Klebsiella pneumonia*. 
Easy *E. coli* Identification for UTIs!

HardyCHROM BluEcoli™ is a revolutionary agar plate for economically screening urine specimens for *E. coli*.

Inoculate both sides of this biplate with the urine specimen. If the infecting organism is *E. coli*, the colonies on the chromogenic side of the biplate will turn blue.¹

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 your urine culture workload.²

- The blue color is confirmatory for *E. coli*. No further confirmation or indole testing is required.³
- Save time and money by not using an expensive identification system.

Select a colony from the blood agar side of the biplate for susceptibility testing.

**Ordering Information**

- 15x100mm biplate BluEcoli™/Blood Agar, 10/pk..............................J123
- 15x100mm biplate BluEcoli™/CNA, 10/pk...............................J116

¹ Colonies of the serotype *E. coli* O157, which are not usually associated with urinary tract infections, are an exception, and will not turn blue on the chromogenic side of the BluEcoli™ Urine Biplate.


³ The performance of a spot indole test alone is not an adequate screen for *E. coli*, since there are at least 52 species of gram-negative bacilli that grow on MacConkey, are indole-positive and ferment lactose.
C. glabrata

C. tropicalis

C. krusei

C. albicans
Candida Speciation Made Easy!

HardyCHROM™ Candida is a selective and differential culture medium that facilitates the isolation and differentiation of clinically important yeast species.

- Useful in detecting mixed yeast infections
- Inhibits the majority of bacterial species

Ordering Information
15x100mm plate,
10/pk.........................G301
*E. coli* produces colonies that are rose to magenta in color with darker pink centers.

*Klebsiella, Enterobacter, and Serratia* spp. produce large, dark blue colonies.

*Pseudomonas* spp. produce colorless to light yellow-green, translucent colonies which may have a slight iridescence with crinkled edges.

*Citrobacter* spp. produce dark blue colonies, often with a rose halo in the surrounding media.

Carbapenemase producing *Klebsiella pneumoniae* colonies.
HardyCHROM™ CRE is used as a primary screening medium for blood, sputum, or urine samples for the simultaneous detection and differentiation of gram-negative bacteria that produce carbapenemase.

Carbapenemase producing bacteria will grow on this medium with the following colors:

- **Klebsiella, Enterobacter, and Serratia** spp. produce large, dark blue colonies
- **E. coli** produces colonies that are rose to magenta in color, with darker pink centers
- **Pseudomonas** spp. produce colorless to light yellow-green, translucent colonies which may have a slight iridescence with crinkled edges
- **Acinetobacter, Salmonella, and Stenotrophomonas** spp. produce colonies that are smooth and off-white in color
- **Citrobacter** spp. produce dark blue colonies often with a rose halo in the surrounding media

**Ordering Information**
15x100mm plate, 10/pk.................................G323

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

Klebsiella pneumoniae (Coliform)
HardyCHROM™ ECC (E. coli-Coliforms) is a chromogenic medium recommended for the detection, differentiation, and enumeration of *Escherichia coli* and other coliforms in food, beverage, or water samples based on colony color.

*E. coli* can be identified as pink to violet-colored colonies on the plate, while coliform bacteria will appear as turquoise colonies. Organisms other than coliforms or *E. coli* (including approximately 4% of *E. coli* strains and most O157 strains) will appear as white or colorless colonies.

**Ordering Information**

HardyCHROM™ ECC, 15x100mm plate, 10/pk..................................................G303

HardyCHROM™ ECC, contact plate for environmental surface sampling, 15x60mm, 10/pk..................................................P17
Escherichia coli  

Staphylococcus aureus  

Pseudomonas aeruginosa  

Citrobacter freundii  

Klebsiella pneumoniae  

Staphylococcus saprophyticus  

Enterococcus faecalis  

Proteus mirabilis  

Candida albicans
HardyCHROM HUrBi™ (HardyCHROM™ Urine Biplate) is formulated to assist in characterizing isolates by isolating gram-positive organisms on one side of the biplate and gram-negative organisms on the other side of the biplate. Facilitates the detection and differentiation of common urinary tract microorganisms.

- **Logical**
  Total separation of organisms with gram-positive on one side and gram-negative on the other side of the biplate.

- **Saves Money**
  Reduce the need for expensive automated ID cards.

- **Confirmatory**
  Identify *E. coli* and *Enterococcus* spp. with no further testing needed! *Proteus vulgaris* can be confirmed with a single spot indole test., Cat. no. Z65.

- **Easy Read-Out**
  Distinct color reactions for each of the common urinary tract pathogens make it easier to detect mixed infections.

**Gram-Positive and Yeast Side**
- *S. aureus*
- *S. epidermidis*
- *S. saprophyticus*
- *Enterococcus* spp.
- *Candida* spp.
- *Listeria* spp.
- *S. agalactiae*

**Gram-Negative Side**
- *Proteus*, *Morganella*, and *Providencia* spp.
- *E. coli*
- KES Group (*Klebsiella*, *Enterobacter*, *Serratia* spp.)
- *Citrobacter* spp.
- *Pseudomonas* spp.

**Ordering Information**
15x100mm biplate, 10/pk........................................J100
HardyCHROM™ ESBL is a selective chromogenic medium recommended for the primary screening and differentiation of Extended-Spectrum Beta-Lactamase (ESBL) producing Enterobacteriaceae.

- Results in as little as 24 hours
- Easy-to-read color read-out

Ordering Information
15x100mm plate, 10/pk.......................................G321

*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.
Listeria innocua

Listeria monocytogenes
(Listeria ivanovii will appear the same.)
Distinct read-out in 24 to 48 hours!

HardyCHROM™ Listeria is a chromogenic medium recommended for the selective isolation, differentiation, and enumeration of *Listeria monocytogenes* from food and environmental samples.

- All *Listeria* species will produce turquoise colonies.
- *Listeria monocytogenes* and *Listeria ivanovii* will turn turquoise and have white opaque halos.

**Ordering Information**

15x100mm plate, 10/pk.....................G317

*Further tests are needed to definitively differentiate between these two species.*
Methicillin-resistant *Staphylococcus aureus* colonies grown aerobically for 24 hours.
HardyCHROM™ MRSA is a selective and differential chromogenic medium recommended for the detection of nasal colonization by methicillin-resistant *Staphylococcus aureus* (MRSA).* Selective agents will inhibit non-MRSA organisms, yeast, and most other Gram-positive cocci.

- Read-out at 24 hours.
- Distinct color change read-out
- Bright color development
- Economical pricing - call for a price comparison!
- Compatible with automation

### Ordering Information

<table>
<thead>
<tr>
<th>Product Description</th>
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<tbody>
<tr>
<td>15x100mm plate (reduced stacking ring for use with auto innoculators), 10/pk</td>
<td>GA307</td>
</tr>
<tr>
<td>HardyCHROM MRSA/ HardyCHROM <em>Staph. aureus</em> Biplate, 15x100mm, 10/pk</td>
<td>J35</td>
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<tr>
<td>MRSA Latex Test for PBP2’ 50 tests</td>
<td>DR900A</td>
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<tr>
<td>Contact Plate for Environmental Monitoring</td>
<td>P14</td>
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</tbody>
</table>

*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.
E. coli O157 produces smooth, pink to mauve colonies. Organisms other than E. coli O157 will be inhibited or appear as blue colonies.
HardyCHROM™ O157 is a selective and differential medium recommended for the isolation of *E. coli* O157 from food and environmental sources. Chromogenic substances in the medium facilitate detection by colony color. Not intended for human diagnostic use.

- HardyCHROM™ O157 provides an initial screen intended to isolate colonies for further testing.
- Confirm isolated purple-pink colonies with a latex agglutination test (Cat. no. PL070HD), antisera (Cat. no. 295798), or other test methods for complete identification.
- Testing for the H7 antigen (Cat. no. 221591, 3ml or Cat. no. 295569, 5ml) or verotoxin testing may also be required.

**Ordering Information**
15x100mm plate, 10/pk.....................G305
*E. coli* O157 produces smooth, pink to mauve colonies. Organisms other than *E. coli* O157 will be inhibited or appear as blue colonies.
HardyCHROM™ O157 is a selective and differential medium recommended for the isolation of *E. coli* O157 from food and environmental sources. Chromogenic substances in the medium facilitate detection by colony color. Not intended for human diagnostic use.

- HardyCHROM™ O157 provides an initial screen intended to isolate colonies for further testing.

- Confirm isolated purple-pink colonies with a latex agglutination test (Cat. no. PL070HD), antisera (Cat. no. 295798), or other test methods for complete identification.

- Testing for the H7 antigen (Cat. no. 221591, 3ml or Cat. no. 295569, 5ml) or verotoxin testing may also be required.

**Ordering Information**
15x100mm plate, 10/pk.................G305
Cronobacter sakazakii
HardyCHROM™ Sakazakii is a chromogenic medium recommended for the selective isolation and differentiation of *Cronobacter (Enterobacter) sakazakii* from other members of the *Enterobacteriaceae* family based on colony color.

- *Cronobacter sakazakii* produces smooth, turquoise colonies.
- Other members of the *Enterobacteriaceae* family will produce white or colorless colonies with or without black centers.
- Most Gram-positive bacteria and yeast will be inhibited on this medium.

**Ordering Information**
15x100mm plate, 10/pk.................G315

Provides assurance of product purity!
Salmonella enterica

Escherichia coli
HardyCHROM™ Salmonella is a chromogenic medium recommended for the selective isolation and differentiation of *Salmonella* spp. from other members of the *Enterobacteriaceae* family based on colony color.

Selective agents inhibit the growth of Gram-positive organisms.

*Salmonella* species will produce deep pink to magenta-colored colonies. Bacteria other than *Salmonella* spp. may produce blue or clear colonies.

**Ordering Information**
15x100mm plate, 10/pk....................G309 

Easy detection of *Salmonella*!
*Salmonella enterica* showing colonies with large black centers with a clear perimeter.

*Proteus mirabilis* showing pale pink or tan colonies with small light to dark brown centers at 24 hours.

*Escherichia coli* showing pink to violet-colored colonies.

*Shigella sonnei* showing teal-colored colonies. Non-\( \text{H}_2\text{S}\) producing Salmonellas will look the same.
Hardy® CHROM™ SS

**Easily rule out false positives!**

HardyCHROM™ SS is a highly selective chromogenic medium for the primary screening of stool for the isolation and differentiation of *Salmonella* and *Shigella* spp. Non-pathogenic organisms are easily ruled out based on colony color or inhibition. Save time and money by not working up false positives.

**Features and Benefits**

- Effectively rules out most *Proteus* spp. and other non-pathogenic non-lactose fermentors
- Requires less colony picking, sub-culturing, and identification
- Reduces the number of plates for primary stool setup
- Reduces labor and material costs by up to 20%

**HardyCHROM™ SS**

15x100mm plate, 10/pk..........................G327

Easily rule out false positives!
Easily rule out false positives!

Staphylococcus aureus

Staphylococcus saprophyticus
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.

*Staphylococcus aureus* can be identified as smooth, pink-colored colonies on the plate. Other organisms may appear as colorless, blue, or cream colonies, or will be inhibited. *Staphylococcus epidermidis* will be inhibited.

**Ordering Information**
15x100mm plate, 10/pk.............G311
E. coli

Enterococcus faecalis

Pseudomonas aeruginosa

Klebsiella pneumoniae
One plate does it all!

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.

- **E. coli** produces magenta colonies (confirmatory, no further testing required).
- **Enterococcus faecalis/ faecium** produces small, turquoise-colored colonies.
- **Pseudomonas** spp. produce light yellow, translucent colonies.
- **Klebsiella, Enterobacter, and Serratia** spp. produce large, deep blue colonies.
- **Proteus, Morganella, and Providencia** spp. produce clear to light yellow colonies with a diffuse golden-orange halo in the medium.
- **S. saprophyticus** produces opaque, pink colonies.
- **S. aureus** produces opaque, white-colored colonies.
- **Candida albicans** produces small, white-moist colonies.

**Ordering Information**

- UTI Plate, 15x100mm plate, 10/pk.................................G313
- UTI Plate, 15x100mm plate, 100/pk..........................G313BX
- Blood Agar/UTI, biplate, 10/pk..................................J119
- Rectangular omniplate, 30ml fill, 86x128mm, 10/pk...............................G354
Proteus mirabilis

Staphylococcus aureus

Staphylococcus saprophyticus

Citrobacter
One plate does it all!

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.

- *E. coli* produces magenta colonies (confirmatory, no further testing required).
- *Enterococcus faecalis/ faecium* produces small, turquoise-colored colonies.
- *Pseudomonas* spp. produce light yellow, translucent colonies.
- *Klebsiella, Enterobacter, and Serratia* spp. produce large, deep blue colonies.
- *Proteus, Morganella, and Providencia* spp. produce clear to light yellow colonies with a diffuse golden-orange halo in the medium.
- *S. saprophyticus* produces opaque, pink colonies.
- *S. aureus* produces opaque, white-colored colonies.
- *Candida albicans* produces small, white-moist colonies.

**Ordering Information**

UTI Plate, 15x100mm plate, 10/pk.................................G313
UTI Plate, 15x100mm plate, 100/pk..........................G313BX
Blood Agar/UTI, biplate, 10/pk..................................J119
Rectangular omniplate, 30ml fill, 86x128mm, 10/pk......................G354
**Differentiated under UV light**

V. parahaemolyticus

V. alginolyticus

No UV light

V. cholerae

V. vulnificus

Looks the same under ambient light
HardyCHROM™ Vibrio was developed as a medium for differentiating *V. cholerae*, *V. parahaemolyticus*, and *V. vulnificus* from other Vibrios based on colony color and fluorescence.

The shellfish pathogen *V. parahaemolyticus* is differentiated from other Vibrios such as *V. alginolyticus* by its teal coloration. The deadly pathogens *V. cholerae* and *V. vulnificus* are differentiated from other Vibrios by their magenta coloration, and from each other by the fluorescence of *V. vulnificus* under UV light. (see photo at left).

*Patent Pending

**Features:**
- The only chromogenic media to differentiate *V. cholerae*, *V. parahaemolyticus* and *V. vulnificus* on the same plate.
- Fluorogenic reaction, adds another dimension for thorough differentiation.
- Superior performance to TCBS.
- PCR is very expensive. Screen first on inexpensive HardyCHROM™ Vibrio!
- Also available in CRITERION™ Dehydrated Culture Media.

**Prepared Media**
15x100mm plate, 10/pk ........ G319

**CRITERION™ Dehydrated Media**
*No supplements required*
2L Mylar® Zip-Bag ................. C9010
500 gm, each ...................... C9011
2 kg, each .......................... C9012
10 kg, each ........................ C9013
“Color is my day-long obsession, joy, and torment.”
- Claude Monet
Chromogenic Culture Media