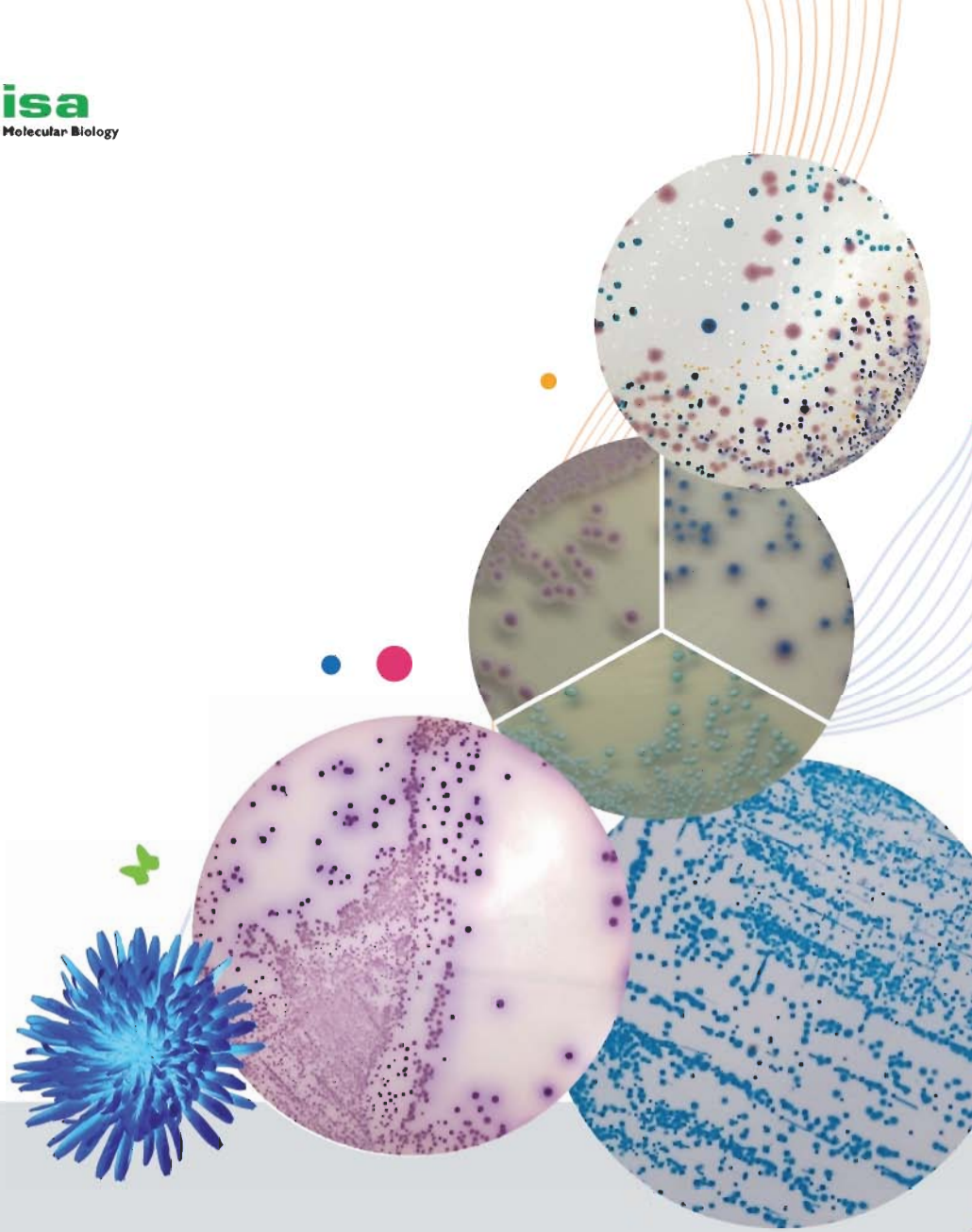




pronadisa
Micro & Molecular Biology

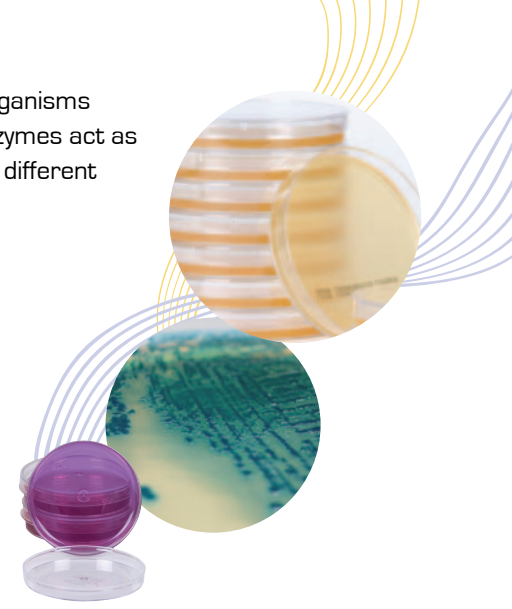
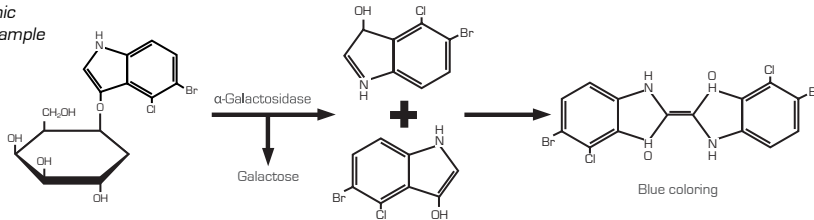


Chromogenic
culture media

Chromogenic substrates have proved to be a powerful tool in the identification of microorganisms due to their detection of specific enzymes produced by the target microorganism. The enzymes act as catalysts of the chromogenic substrate, making the microorganism grow a specific color, different for each bacteria, thus facilitating colony differentiation. These chromogenic media permit:

- **Enhanced accuracy and easy microbial detection** and identification by means of color.
- **Cost efficient working process.**
- **Time lag reduction,** faster bacterial identification and results.

Chromogenic reaction example



Chromogenic media are available as dehydrated media or in ready-to-use formats.

Industrial Chromogenic Media

- Lauryl Sulfate Chromogenic Broth
- TBX Chromogenic Agar ISO 16649-2
- E.coli Coliforms Chromogenic Medium
- Salmonella Chromogenic Medium
- Listeria Chromogenic Agar Base ISO 11290
- m-EI Chromogenic Agar
- Enterobacter Sakazakii Isolation Agar ISO 22964

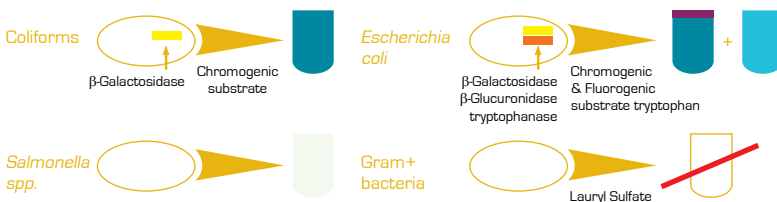
Clinical Chromogenic Media

- MRSA Agar
- Candida Chromogenic Agar
- UTIC Chromogenic Agar (Urinary Tract Infections)

Lauryl Sulfate Chromogenic Broth

Enrichment medium for the simultaneous detection of total coliforms and *Escherichia coli* in water, foods and dairy products.

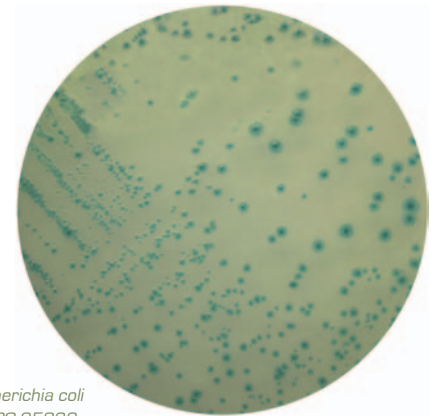
- Chromogenic and fluorogenic substrates allow the detection of total coliforms and *Escherichia coli* count at the same time.
- The chromogenic substrate detects the presence of coliforms changing the color from colorless to blue-greenish.
- The fluorogenic substrate indicates the presence of *Escherichia coli*.
- Lauryl Sulfate inhibits Gram-positive bacteria.
- Tryptophan promotes indole reaction.
- Results in 24 hours.
- Different pack sizes: 500 g/100 g/bulk packs.
- Easy interpretation through medium color:
 - Coliforms: Blue-greenish
 - *Escherichia coli*: Blue-greenish; fluorescence at 366 nm +; indole +
 - *Salmonella spp.*: Colorless



TBX Chromogenic Agar (ISO 16649-2)

Selective medium for the presumptive detection and enumeration of *Escherichia coli* in foods and water.

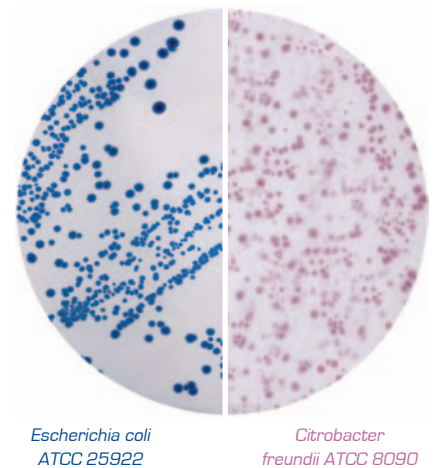
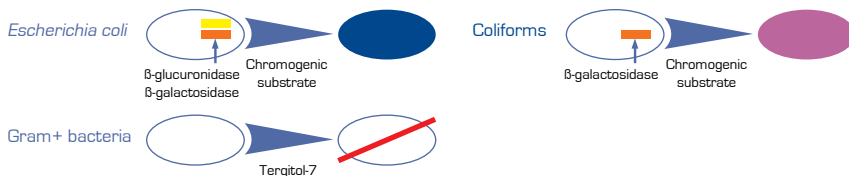
- Tryptone Bile Salts Agar, with the addition of x-β-D-glucuronide, detects the presence of the enzyme glucuronidase, which is highly specific for *Escherichia coli*.
- Bile Salts inhibit other Gram-positive organisms and suppress coliform bacteria.
- Incubation at 44°C inhibits the growth of most bacteria.
- Results in 24 hours.
- It can be used with the membrane filter technique.
- Different pack sizes: 500 g/100 g/bulk packs/90 mm plates/55 mm water quality control plates.
- Easy interpretation through colony color:
 - *Escherichia coli*: Green-blue
 - *Salmonella*, *Enterococcus*, *Klebsiella*: Inhibited
- TBX Chromogenic Agar complies with ISO 16649-2.
- *Escherichia coli* O157:H7 is β-D-glucuronidase-negative and presents colorless colonies.



E.coli-Coliforms Chromogenic Medium

Selective medium for the simultaneous presumptive detection of *Escherichia coli* and other coliforms in water and food samples.

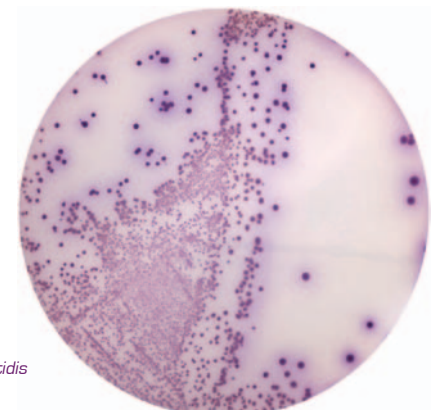
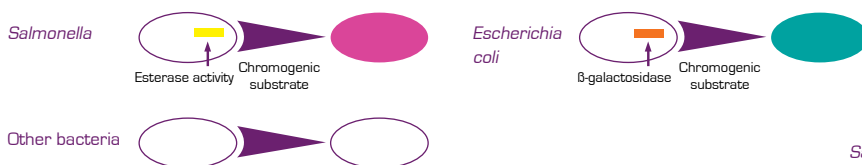
- Quick colony growth due to the interaction of ingredients in the medium.
- Tergitol-7 inhibits Gram-positive bacteria.
- Salmon-Gal and x-β-glucuronide, as substrates, give a dark blue color to *Escherichia coli* colonies, easily distinguishable from other coliform colonies that have a salmon to red color due to the use of Salmon-Gal.
- Addition of tryptophan allows performance of the indole test for further *Escherichia coli* confirmation.
- Results in 24 hours.
- Different pack sizes: 525 g/105 g/bulk packs/90 mm plates/55 mm water quality control plates.
- Easy interpretation through colony color:
 - *Escherichia coli*: Blue-dark violet
 - *Salmonella enteritidis*: Colorless
 - *Citrobacter freundii*: Salmon
 - *Enterococcus faecalis*: Null
- *Escherichia coli* O157:H7 is β-D-glucuronidase-negative and presents pink colonies.



Salmonella Chromogenic Medium

Medium for the detection and presumptive identification of *Salmonella* species in food, water and clinical samples.

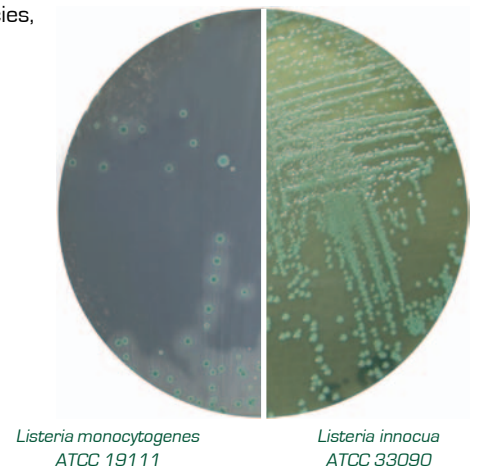
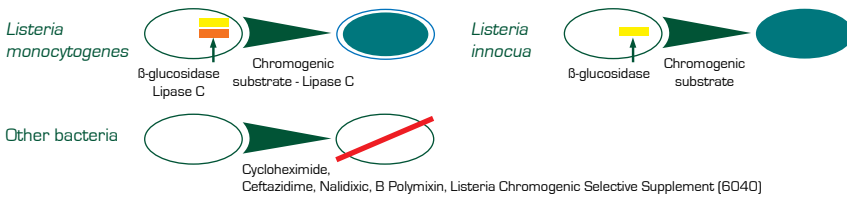
- X-Gal is a substrate incorporated to visualize the enzyme β-D-galactosidase that gives the colonies their blue color.
- Magenta-caprylate gives a magenta color to the Lactose-negative *Salmonella* species.
- Results in 24 hours.
- Different pack sizes: 575 g/115 g/bulk packs/90 mm plates.
- Easy interpretation through colony color:
 - *Escherichia coli*: Blue-green
 - *Proteus vulgaris*: Colorless
 - *Salmonella* spp.: Magenta



Listeria Chromogenic Agar Base (ISO 11290)

Medium for the presumptive detection and enumeration of *Listeria monocytogenes* in food.

- X-β-glucoside detects the presence of the enzyme β-glucosidase, common to all *Listeria* species, giving the colonies their blue color.
- Lithium Chloride provides the selectivity of the medium.
- Two supplements are required:
 - Listeria Lipase C Supplement (Cat. No. 6031): Specific enzyme for *Listeria monocytogenes*. Responsible for the opaque halo which surrounds *Listeria monocytogenes*.
 - Listeria Chromogenic Selective Supplement (Cat. No. 6040): Inhibits other organisms.
- Results in 48 hours.
- Listeria Chromogenic Agar Base complies with ISO 11290.
- Different pack sizes: 500 g/ 106 g/bulk packs/90 mm plates.
- Easy interpretation through colony color:
 - *Listeria monocytogenes*: Blue with a positive halo
 - *Listeria innocua*: Blue with a negative halo
 - *Enterococcus faecalis*: Inhibited
 - *Escherichia coli*: Inhibited



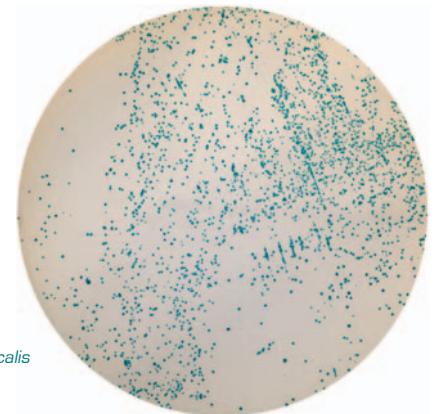
m-EI Chromogenic Agar

Medium for the detection and enumeration of presumptive *Enterococcus* in water through the single-step membrane filtration technique.

- X-glucoside detects the presence of the enzyme glucosidase, synthesized by glucosidase-positive enterococci. Glucosidase is used by these bacteria giving the colonies their blue color.
- Cycloheximide and Sodium Azide inhibit the rest of the organisms.
- Nalidixic Acid is added to increase selectivity.
- Results in 24 hours.
- Different pack sizes: 500 g/ 100 g/bulk packs/90 mm plates/55 mm water quality control plates.
- Easy interpretation through colony color:
 - *Enterococcus faecium*: Blue
 - *Enterococcus faecalis*: Blue



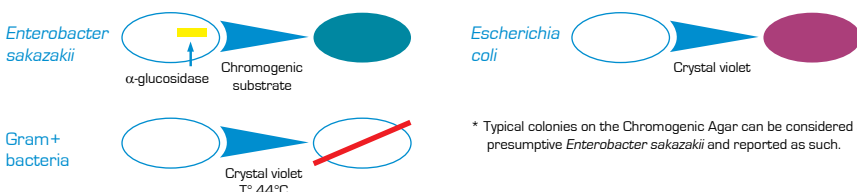
Enterococcus faecalis ATCC 19433



Enterobacter Sakazakii Isolation Agar (ISO 22964)

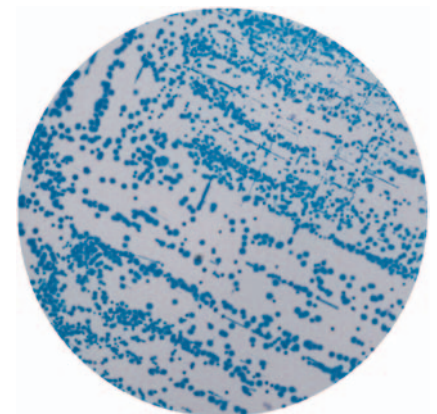
Medium to isolate *Enterobacter sakazakii* in milk powder and powdered infant formulae.

- Glucose is added to enhance the specificity of *Enterobacter sakazakii* detection due to α-D-Glucosidase, an enzyme specific for *Enterobacter sakazakii*.
- Crystal violet inhibits Gram-positive bacteria and the most fastidious Gram-negative organisms.
- Results in 24 hours.
- Enterobacter Sakazakii Isolation Agar complies with ISO 22964.
- Different pack sizes: 500 g/ 100 g/bulk packs/90 mm plates.
- Easy Interpretation through colony color:
 - *Escherichia coli*: Transparent/ red-violet
 - *Enterobacter sakazakii*: Green/ greenish-blue
 - *Staphylococcus spp.*: Inhibited



* Typical colonies on the Chromogenic Agar can be considered as presumptive *Enterobacter sakazakii* and reported as such.

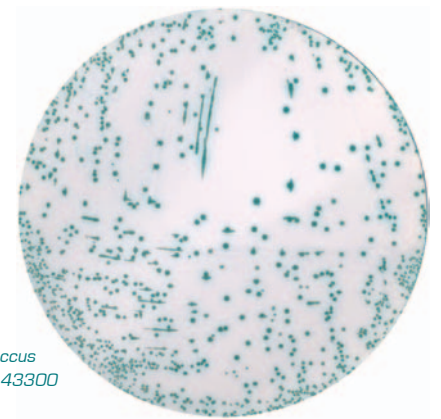
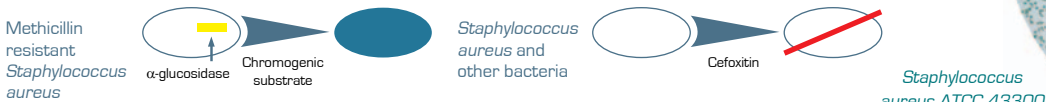
Enterobacter sakazakii ATCC 29544



MRSA Agar

For the presumptive detection of Methicillin resistant *Staphylococcus aureus* in clinical samples.

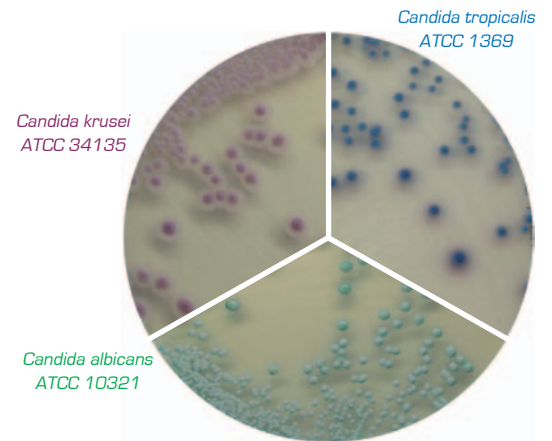
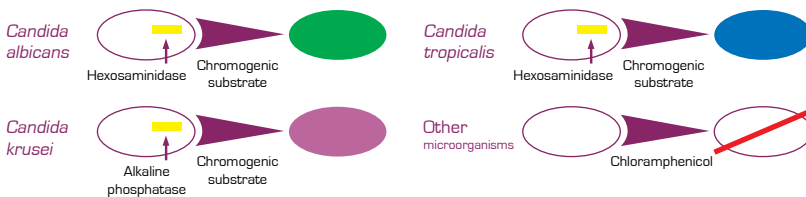
- α -glucosidase produced by *Staphylococcus aureus* cleaves the chromogenic substrate and gives a blue color to *Staphylococcus aureus* colonies.
- Cefoxitin Supplement (Cat. No. 6069) inhibits the growth of *Staphylococcus aureus* sensitive to Methicillin.
- Results in 24 hours.
- Different pack sizes: 520 g/100 g/bulk packs/90 mm plates.
- Easy interpretation through colony color:
 - *Staphylococcus aureus* ATCC 25923: Inhibited
 - *Staphylococcus aureus* ATCC 43300: Blue
 - *E.coli*: Inhibited



Candida Chromogenic Agar

Differential and selective medium for the isolation and quick identification of presumptive *Candida* spp. of clinical importance.

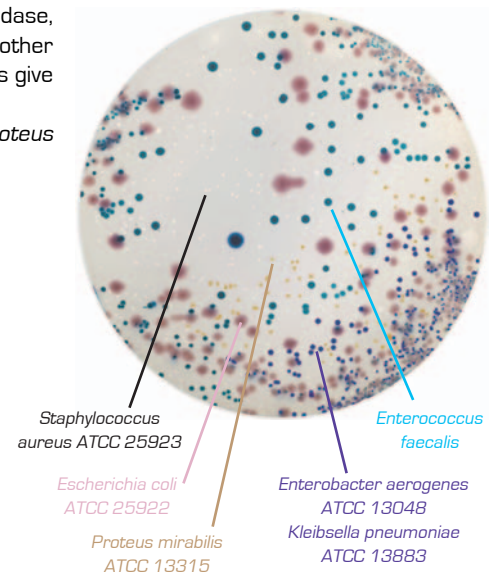
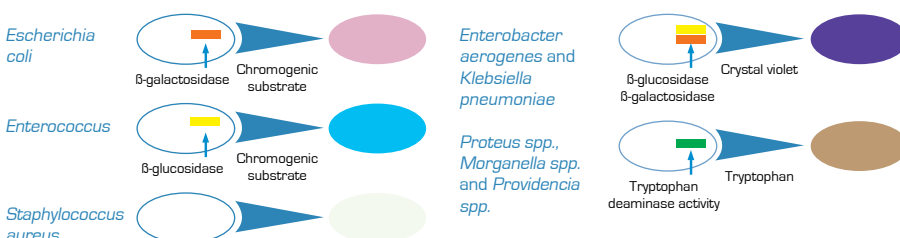
- Chromogenic substrates can differentiate three *Candida* species: *Candida albicans*, *Candida tropicalis* and *Candida krusei*.
- Different colored colonies allow easy plate reading.
- Results in 24 hours. Must also be observed at 48 and 72 hours.
- Different pack sizes: 505 g/100 g/bulk packs/90 mm plates.
- Easy interpretation through colony color:
 - *Candida albicans*: Green
 - *Candida krusei*: Purple-pink
 - *Candida tropicalis*: Blue



UTIC Chromogenic Agar (Urinary Tract Infections)

For the presumptive detection and differentiation of organisms which cause urinary tract infections in clinical samples.

- Two different chromogenic substrates are present in this medium. One is cleaved by β -glucosidase, allowing the specific detection of *Enterococci*, which form blue or turquoise colonies. The other chromogen is cleaved by β -galactosidase, giving *E.coli* a pink color. Cleavage of both enzymes give the colonies a dark blue-purple color.
- Tryptophan provides a presumptive indication of tryptophan deaminase activity giving *Proteus* spp., *Morganella* spp. and *Providencia* spp. a light brown color.
- Results in 24 hours.
- Different pack sizes: 525 g/100 g/bulk packs/90 mm plates.
- Easy interpretation through colony color:
 - *Escherichia coli*: Pink
 - *Enterobacter aerogenes*: Dark blue/purple
 - *Klebsiella pneumoniae*: Dark blue/purple
 - *Proteus mirabilis*: Light brown
 - *Staphylococcus aureus*: White cream
 - *Enterococcus faecalis*: Light blue





pronadisa
Micro & Molecular Biology

Laboratorios CONDA was founded in 1960 as the first Spanish producer of Dehydrated Culture Media for Microbiology and Molecular Biology. The company is now internationally recognized as one of the leaders in the field and supplies key ingredients for use in research and testing, such as Agars, Peptones and Agaroses, among other products.

Following our mission of being a major contributor to the field of Life Sciences through the design, production and provision of products and services of the highest quality and value, CONDA has developed, after six years of thorough research and investigation, a **full range of chromogenic media** for the detection and further study of microbial growth through color reaction and differentiation.



LABORATORIOS CONDA

C/ La Forja, 9 • 28850 Torrejón de Ardoz • MADRID
Phone + 34 91 761 02 00
Fax + 34 91 761 02 06 / 91 656 82 28
comercial@condalab.com • export@condalab.com

www.condalab.com

LAURYL SULFATE CHROMOGENIC BROTH - Cat. No. 1465

Pack sizes: 500 g / 100 g / Bulk packs

TBX CHROMOGENIC AGAR [ISO 16649-2:2001] - Cat. No. 1151

Pack sizes: 500 g / 100 g / Bulk packs / 90 mm plates / 55 mm water quality control plates

E.COLI-COUIFORMS CHROMOGENIC MEDIUM - Cat. No. 1340

Pack sizes: 525 g / 105 g / Bulk packs / 90 mm plates / 55 mm water quality control plates

SALMONELLA CHROMOGENIC MEDIUM - Cat. No. 1122

Pack sizes: 575 g / 115 g / Bulk packs / 90 mm plates

LISTERIA CHROMOGENIC AGAR BASE [ISO 11290:2004]

Cat. No. 1345

Pack sizes: 500 g / 106 g / Bulk packs / 90 mm plates

m-EI CHROMOGENIC AGAR - Cat. No. 1412

Pack sizes: 500 g / 100 g / Bulk packs / 90 mm plates / 55 mm water quality control plates

ENTEROBACTER SAKAZAKII ISOLATION AGAR [ISO 22964:2006]

Cat. No. 1446

Pack sizes: 500 g / 100 g / Bulk packs / 90 mm plates

MRSA AGAR - Cat. No. 1423

Pack sizes: 520 g / 100 g / Bulk packs / 90 mm plates

CANDIDA CHROMOGENIC AGAR - Cat. No. 1382

Pack sizes: 505 g / 100 g / Bulk packs / 90 mm plates

URINARY TRACT INFECTIONS CHROMOGENIC AGAR [UTIC]

Cat. No. 1424

Pack sizes: 525 g / 100 g / Bulk packs / 90 mm plates

Life is a great
Discovery