

## CHROMagar™ Orientation

### Chromogenic medium for the isolation and differentiation of urinary tract pathogens

article number RT410 : 1000 ml bottle  
article number RT412 : 5000 ml bottle  
article number RT413 : bulk size

NT-EXT-002

Version 7

**STORAGE** Store the powder at 15/30°C until the shelflife date indicated on the label.

**COMPOSITION in g/L** Agar 15.0; Peptone and yeast extract 17.0; Chromogenic mix 1.0; pH: 7.0 +/- 0.2 (Classical formula adjusted and/or supplemented as required to meet performance criteria).

**PREPARATION** For pre-weighed dose of medium, add dry powder to the corresponding volume of purified water. Alternatively, suspend the medium in the proportion of 33.0 g/L of purified water. Disperse powder slowly in water by rotating for swelling of the agar. Heat and bring to boiling (100°C) while swirling or stirring regularly and AUTOCLAVE at 121°C during 15 min. For the 100°C heating step, mixture may also be brought to a boil in a microwave oven: after initial boiling, remove from oven, stir gently, then return to oven for short repeated bursts of heating until complete fusion of the agar grains has taken place (large bubbles replacing foam). Note: in some instance, autoclave may be not necessary and the 100°C step may be sufficient for sterilisation. Cool in a water bath to 45-50°C, swirling or stirring gently. Pour into sterile Petri dishes or tubes and allow to gel and dry.

Store in the dark. Prepared media plates can be kept for one day at ambient temperature. Plates can be stored for up to two weeks under refrigeration (2/8°C) if properly prepared and protected from light and dehydration.

**INOCULATION** If the agar plate has been refrigerated, allow to warm to room temperature before inoculation. Streak sample onto plate and incubate at 37°C for 18-24 hours.

### INTERPRETATION

#### Microorganism → Typical colony appearance

<i>E. coli</i>	→ red
<i>Enterococcus</i>	→ turquoise blue
<i>Klebsiella, Enterobacter, Citrobacter</i>	→ metallic blue
<i>Proteus</i>	→ brown halo
<i>Pseudomonas</i>	→ cream, translucent
<i>Staph. aureus</i>	→ golden, opaque, small
<i>Staph. saprophyticus</i>	→ pink, opaque, small

**DISPOSAL OF WASTE** After interpretation all plates should be destroyed by autoclaving at 121°C for at least 20 minutes.

**English.** For *in vitro* diagnostic use.

Laboratory product to be used only by trained personnel.

## BIBLIOGRAPHY

Merlino, J. *et al.* 1996. Evaluation of CHROMagar Orientation for Differentiation and Presumptive Identification of Gram-Negative Bacilli and Enterococcus Species. J.Clin. Microbiol. 34: 1788-1793

Samra, Z. *et al.* 1998. Evaluation of Use of a New Chromogenic Agar in Detection of Urinary Tract pathogens. J.Clin. Microbiol. 36: 990-994

Houang, E. *et al.* 1999. The Use of CHROMagar Orientation as a Primary Isolation Medium with Presumptive Identification for the Routine Screening of Urine Specimens. APMS 107: 859-862.

### TABLE

- ◆ RED translucent → Indole test  
(+) = *E. coli*
- ◆ Steel BLUE, Gram stain (-), appearance bacilli  
= *Klebsiella, Enterobacter, Serratia, Citrobacter*
- ◆ BROWN halo or brown agar, FeCl<sub>3</sub> if needed  
(+) = *Proteus vulgaris* (blue colony center), *Morganella, Providencia*  
(-) = *Proteus mirabilis*
- ◆ Turquoise BLUE, small colonies, Gram stain + appearance cocci → PYR test (or serological or hemolysis)  
PYR (+) = *Enterococcus*  
PYR (-) = *Streptococcus B*
- ◆ OPAQUE, small colonies, Gram stain + appearance cocci  
(PINK) = *Staphylococcus saprophyticus*  
(CREAM) = *Staphylococcus aureus*, etc.
- ◆ Other aspect → classical identification

### Available from CHROMagar :

#### CHROMagar™ Candida

Differentiation of major pathogenic *Candida* species

#### CHROMagar™ Orientation

Differentiation of urinary tract pathogens

#### Rambach™ Agar

Detection of *Salmonella* spp

#### CHROMagar™ Salmonella

Detection of *Salmonella* including *S. Typhi*

#### CHROMagar™ Salmonella Plus

Detection of *Salmonella* according to the ISO 6579:2002 norm

#### CHROMagar™ O157

Detection of *E. coli* O157

#### CHROMagar™ E.coli

Detection and enumeration of *E. coli*

#### CHROMagar™ ECC

Detection and enumeration of *E. coli* and coliforms

#### CHROMagar™ Liquid ECC

Broth for pad technique for *E. coli*-coliforms

#### CHROMagar™ Staph aureus

Detection and enumeration of *Staphylococcus aureus*

#### CHROMagar™ MRSA

Detection of MRSA including low level MRSA

#### CHROMagar™ Listeria

Detection and enumeration of *Listeria monocytogenes*

#### CHROMagar™ Vibrio

Detection and enumeration of *Vibrio parahaemolyticus*, *Vibrio vulnificus* and *Vibrio cholerae*

#### CHROMagar™ VRE

Detection of *E. faecium* VRE & *E. faecalis* VRE

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