

# CHROMAGAR ESBL

**Intended use:** for overnight detection of Gram-negative bacteria producing Extended Spectrum Beta-Lactamase.  
**For *in vitro* diagnostics use only.**

**1. Product summary and explanation:** for detection of Gram-negative bacteria producing Extended Spectrum Beta-Lactamase.

2.

<b>Formula / Liter:</b>		<b>Supplements / Liter:</b>	
Chromogenic mix	1,0 g	Selective mix	0,57 g
Pepton and yeast extract	17,0 g		
Agar	15,0 g		

**3. pH:** 7,0 ± 0,2 at 25°C.

**4. Preparation:** Suspend the medium on the proportion of 33,0 g 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. Cool in a water to 45-50°C, swirling gently. Aliquote the required supplement powder for 570 mg/l final. Vitrex this supplement to homogenise and add to melted and cooled CHROMagar Orientation. Pour into sterile Petri dishes and allow to gel and dry.

**5. 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.

**6. Performance and limitations:** Final identification requires additional testing. Some *Pseudomonas spp.* and *Acinetobacter spp.*, widely-known to be frequently Multi Drug Resistant bacteria, could growth on the medium with typical colony aspects as expected on CHROMagar Orientation.

**7. Quality control:** cultural response at 37°C and examined for growth after 18 – 24 hours incubation:

**Microorganism:**

*Escherichia coli* ATCC 25922

*Escherichia coli* ATCC 35218

*Klebsiella pneumoniae* ATCC 700603

*Klebsiella pneumoniae* ATCC 10031

*Proteus vulgaris* (ESBL +)

*Proteus vulgaris* ATCC 8427

**Typical colony appearance:**

inhibited

dark pink to reddish

metallic blue

inhibited

brown halo

inhibited

**8. Storage:** Prepared media plates can be stored up to 3 months at 6 – 12°C. Protect from light.

**9. Disposal of waste:** After interpretation all plates should be destroyed by autoclaving at 121°C for at least 20 min.

**10. Packaging:** ref. no. 1470 ready to use plates (1x10 pcs);

**11. Expiration:** ready to use plates – 90 days (total shelf life);

**12. References:**

1. Evaluation of CHROMagar Orientation for Differentiation and Presumptive Identification of Gram Negative Bacilli and *Enterococcus* species. Merlino J. *et al.* 1996 Journal of Clinical Microbiology, 34:1788-1793.
2. Comparison of three selective media for the recovery of Extended Spectrum  $\beta$ -Lactamase (ESBL)-producing Enterobacteriaceae. M. Jones, A. Sweeney, E. Stoeppler, M. Miller, and P. Gilligan Clinical Microbiology-Immunology Laboratories UNC Hospitals 2011.
3. Evaluation of a chromogenic medium for extended-spectrum beta-lactamase (ESBL)-producing Enterobacteriaceae. Philippe Lagacé-Wiens *et al.* University of Manitoba, Canada. ECCMID Poster 2010.
4. -Evaluation of a chromogenic agar medium for the detection of extended-spectrum beta-lactamase producing Enterobacteriaceae. R.Saito. University of Tokyo hospital and Tokyo Medical & Dental University – Tokyo – Japan Letters in Applied Microbiology ISSN 0266 8254, 51, 704-706 ABSTRACT ONLY 2010.

**13. Revision date:** 2016/11/25

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