

E. coli-Enterobacteria Chromogenic Agar Cat #: MM-M-NO018

For the differentiation of E.coli and Enterobacteria in foods.

Principles and uses:

E. coli-Enterobacteria Chromogenic Agar is used for the differentiation of E.coli from the rest of Enterobacteria. In the same plate it is able to enumerate E. coli and enterobacteria.

The medium can be inoculated directly with a loop. E.coli is easily distinguishable due to the dark blue-greenish blue colony color. Enterobacteria will growth as magenta colonies. The rest of bacteria are inhibited, and in case of growing, they will grow as colorless colonies.

Note: Some Shigella strains contain the same enzyme as E. coli and can grow as light blue colonies. E.coli O157:H7 do not contain the enzyme to produce blue colonies and will grow magenta.

Formula per Litre:

Bacteriological agar	14g	Chromogenic mixture	0.5g
Nutrients	16g		

Preparation:

Suspend 30.5 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution AVOID OVERHEATING. DO NOT AUTOCLAVE. Cool to 45-50°C, mix well and dispense into plates.

Instructions for use:

Inoculate and incubate at 35±2°C for 18-24 hours.

Quality control:

Solub	ility A	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o re	w/o rests Fine powder		Beige	Amber, slightly opalescent	7.1±0.2

Microbiological test:

Incubation conditions: (35±2 °C / 18-24 h).

Microorganisms	Specification	Characteristic reaction
Shigella flexneri ATCC 12022	Good growth	Pink colonies
Salmonella enteritidis ATCC 13076	Good growth	Pink colonies
Salmonella typhimurium ATCC 14028	Good growth	Pink colonies
Escherichia coli ATCC 25922	Good growth	Dark blue-greenish blue colonies
Enterococcus faecalis ATCC 29212	Total inhibition	
Staphylococcus aureus ATCC 6538	Total inhibition	
Salmonella typhi ATCC 6539	Good growth	Pink colonies
Escherichia coli ATCC 8739	Good growth	Dark blue-greenish blue colonies

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Storage:

Once opened keep powdered medium closed to avoid hydration.



Bibliography:

Alonso, J.L. Soriano, K., Amoros I., Ferrus, M.A. 1998 Cevartitatine determination of E. coli and fecal coliforms in water using a chromogenic medium.J. Environ. Sci Health 33. Journal Clinical Microbiology, Vol. 41 nº 7 p. 3229-3232. July 2003 Robert Cassar and Paul Cuschieri.

J.D. Perry, Michael Furs, Jeffrey Taylor, Et. Al. Journal Clinical Microbiology, March 1999, pag. 766-768 Vol. 37. nº 3 Gallioto di camillo, p. Et. Al. (J. Clinil Microbiol. March 1999.



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