E. coli-Enterobacteria Chromogenic Agar

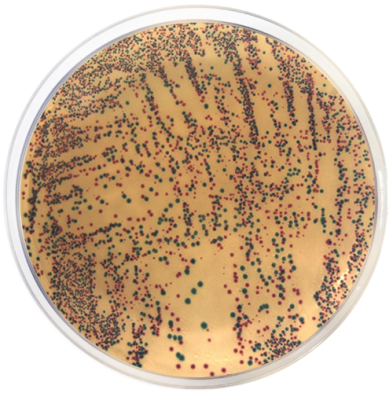
Cat. 2018

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

Practical information

Aplications	Categories
Differentiation	Enterobacteria
Differentiation	Escherichia coli

Industry: Food



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 growh magenta.

Formula in g/L

Bacteriological agar	14	Chromogenic mixture	0,5
Nutrients	16		

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 ºC, mix well and dispense into plates.

Instructions for use

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

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Beige	Amber, slightly opalescent	7,1±0,2

Microbiological test

Incubation conditions: (35±2 ºC / 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

Storage

Temp. Min.:2 ºC
Temp. Max.:8 ºC

Bibliography

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