



HiCrome Enterobacter sakazakii Agar

M1577

HiCrome Enterobacter sakazakii Agar is recommended for the isolation and identification of *Cronobacter sakazakii* from food and dairy products.

Composition**

Ingredients	Gms / Litre
Casein enzymic hydrolysate	15.000
Papaic digest of soyabean meal	5.000
Sodium chloride	5.000
Sodium deoxycholate	0.500
Sodium thiosulphate	1.000
Chromogenic mixture	10.170
Agar	15.000
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 51.67 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and pour into sterile Petri plates.

Principle And Interpretation

Enterobacter species are widely distributed in nature occurring in fresh water, soil, sewage, plants, vegetables, animal and human faeces. *Cronobacter sakazakii* has been closely associated with neonatal meningitis and sepsis (1). The chromogenic substrate in HiCrome Enterobacter sakazakii Agar is cleaved specifically (2) by the glucosidase enzyme possessed by *Enterobacter* species resulting in formation of blue-green colonies. Other organisms, which do not cleave this substrate, produce yellow coloured colonies. Incorporation of the chromogenic mixture in the media renders an intense blue colour to *C.sakazakii* colonies whereas light blue green colour to the other *Enterobacter* species.

Casein enzymic hydrolysate and papaic digest of soyabean meal provide the essential growth nutrients along with nitrogenous and carbonaceous compounds. Sodium chloride helps in maintaining the osmotic equilibrium of the medium. Sodium deoxycholate inhibits the accompanying gram-positive flora.

Key: *: Formerly known as *Enterobacter sakazakii*

Quality Control

Appearance

Light yellow to pink homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Purple coloured, clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 5.16% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH

7.10-7.50

Cultural Response

M1577: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony
----------	----------------	--------	----------	------------------

<i>Escherichia coli</i> ATCC 25922	50-100	good-luxuriant	$\geq 50\%$	yellow
<i>Enterobacter aerogenes</i> ATCC 13048	50-100	good-luxuriant	$\geq 50\%$	green
<i>Enterococcus faecalis</i> ATCC 29212	$\geq 10^3$	inhibited	0%	
* <i>Cronobacter sakazakii</i> ATCC 12868	50-100	good-luxuriant	$\geq 50\%$	blue
<i>Staphylococcus aureus</i> ATCC 25923	$\geq 10^3$	inhibited	0%	
<i>Klebsiella pneumoniae</i> ATCC 13883	50-100	good-luxuriant	$\geq 50\%$	green (mucoid)

Key: *: Formerly known as *Enterobacter sakazakii*

Storage and Shelf Life

Store dehydrated powder and prepared medium at 2-8°C. Use before expiry period on the label.

Reference

1. Muytjens H. L., Zanen H. C., Sonderkamp H. J. et al, J. Clin Microbiol 18:115-120, 1983.
2. Isenberg, (Ed.), 1992, Clinical Microbiology Procedures Handbook, Vol. 1, American Society for Microbiology, Washington, D. C.

Revision : 2 / 2015

Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.