CM 22,193 - CHROMOGENIC ENTEROBACTER SAKAZAKIIAGAR,MODIFIED (ISO 22964:2017, ISO 22964:2006)

INTENDED USE

For isolation and identification of Cronobactersakazakii from milk and milk products

PRODUCT SUMMARY AND EXPLANATION

Enterobacter speciesarewidelydistributed innature occurring in fresh water, soil, sewage, plants, vegetables, animal and human feaces. Cronobacter sakazakii has been closely associated with neonatal meningitis and sepsis. Chromogenic Enterobacter sakazakii Agar, Modified is recommended by ISO Committee for the isolation and identification of C.sakazakii. The media involves Cleavage of the chromogenic substrate (5-Bromo-4-chloro-3-indolyl α-D-glucopyranoside) that results in different characteristics colours and helps in easy differentiation.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Casein enzymic hydrolysate	7.000
Sodium chloride	5.000
Yeast extract	3.000
Sodium deoxycholate	0.600
5-Bromo-4-chloro-3-indolyl α–D-glucopyranoside	0.150
Crystal violet	0.002

PRINCIPLE

Casein enzymic hydrolysate andyeast extract provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential growth nutrients. Sodium chloride helps in maintaining the osmotic equilibrium of the medium. Sodium deoxycholate and crystalviolet inhibits the accompanying gram-positive flora. The chromogenic substrate is cleaved specifically by C.sakazakii resulting in the formation of blue green colonies. Other organisms, which do not cleave this substrate, produce colourless toslightly violet coloured colonies.

INSTRUCTION FORUSE

Dissolve 30.75grams in 1000 ml distilled water.
Gently heat toboiling with swirling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
Cool to 45-50°C.
Mix well.
Pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of powder	:	Light yellow to pink homogeneous free flowing powder
Appearance of prepared medium	:	Light purple coloured, clear to slightly opalescent gel
pH (at 25°C)	:	7.0±0.2

INTERPRETATION

Culturalcharacteristics observed after an incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Recovery	Incubation Temp.	Incubation Period
Escherichia coli	25922	50-100	Good-Luxuriant	Colourless with blue centre	>=50%	44±1°C	22-26 Hours
Enterococcus faecalis	29212	≥ 1000	Inhibited	-	0%	44±1°C	22-26 Hours
*Cronobacter sakazakii	12868	50-100	Good-Luxuriant	Blue green	>=50%	44±1°C	22-26 Hours
Staphylococcus aureus	25923	≥ 1000	Inhibited	-	0%	44±1°C	22-26 Hours

*Formerly known as Enterobacter sakazakii

PACKAGING

Inpacksizeof100gm & 500gm bottles.

STORAGE

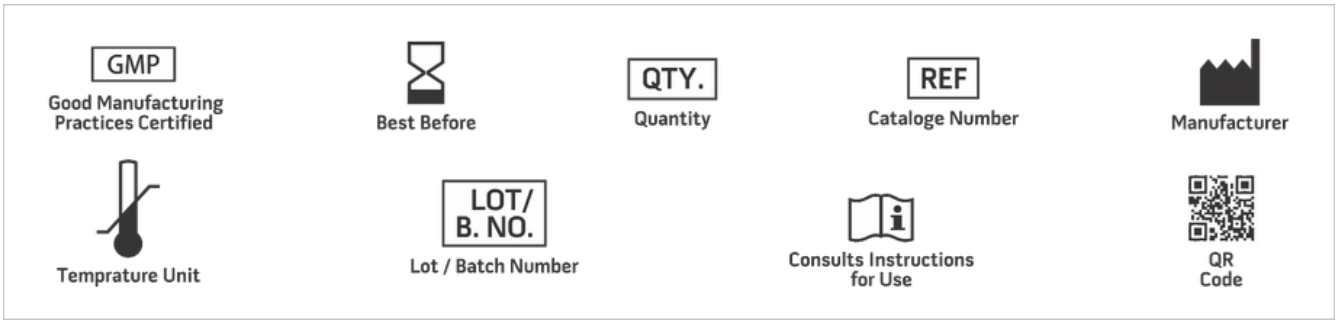
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.
Product Deterioration: Do not use if power show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. MuytjensH. L.,Zanen H. C., Sonderkamp H. J. et al, J. ClinMicrobiol 18:115-120, 1983.
2. International Organization for Standardization. Milk and Milk products- Detection of Enterobactersakazakii Draft ISO/ TS 22964, 2006 (E).



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only