CM 20517 – CRONOBACTER SELECTIVE BROTH (CSB) (ISO 22964:2017)

INTENDED USE

For screening Cronobacter (formerly Enterobacter sakazakii) from food.

PRODUCT SUMMARY AND EXPLANATION

Cronobacter (formerly Enterobacter sakazakii) are gram-negative rod-shaped Enterobacteriaceae that have been implicated in outbreaks of disease causing sepsis, meningitis and necrotising enterocolitis. Cronobacter species have also been isolated from powdered infant formula as high tolerance to desiccation provides a competitive advantage in dry environments increasing the risk of contamination. Cronobacter Screening Broth was specifically designed by Iversenetal. Cronobacter Selective Broth is recommended by ISO Committee for the isolation of Cronobacter species from food samples.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Meat extract	3.000
Sodium chloride	5.000
Bromocresol purple	0.040
Sucrose	10.000

PRINCIPLE

Peptoneand meat extract provide carbonaceous, nitrogenous and growth nutrients. Sodium chloride maintains osmotic equilibrium. Sucrose is the fermentable carbohydrate and bromocresol purple is the indicator. Sucrose is fermented by Cronobacter. Consequently, the broth turns yellow after incubation.

INSTRUCTION FOR USE

Dissolve 28.04grams in 1000 ml distilled water.
Heat if necessary to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
Aseptically add the contents of 1 vial of Vancomycin supplement.
Mix well and dispense 10ml into sterile test tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Purple coloured clear solution forms in tubes.
pH (at 25°C)	: 7.4±0.2

INTERPRETATION

Culturalcharacteristics observed with added Vancomycin Supplement, after an incubation at 41.5 ± 1°C for 24±2 hours.The broth is recovered on chromogenic Cronobacter Isolation Agar (CCI Agar) and incubated at 41.5±1°C for 24±2 hours.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of medium	Colour of colony on Cronobacter Isolation agar (CCI)
Cronobacter sakazakii	29544	50-100	Good-luxuriant	>=50%	Yellow	Blue-green
Cronobacter muytjensii	51329	50-100	Good-luxuriant	>=50%	Yellow	Blue-green
Staphylococcus aureus subsp. aureus	25923	50-100	None-poor	0-10%	Purple	-
Staphylococcus aureus subsp. aureus	6538	50-100	None-poor	0-10%	Purple	-

PACKAGING:

Inpacksizeof100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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 they 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. Mullaneetal. 2007. Minerva Pediatr. 59.137-148.
2. Lai.2001.Medicine.80.113-122. 3. Iversen et al.2008.Appl.Environ.Microbiol.74, 2550-2552.
4.International Organization for Standardization. Microbiology of the food chain- Horizontal method for the detection of Cronobacter spp. Draft ISO/ TS 22964, 2017 (E).
5. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

GMP	Good Manufacturing Practices Certified
⌛	Best Before
QTY.	Quantity
REF	Catalogue Number
🏭	Manufacturer
🌡	Temprature Unit
LOT/ B. NO.	Lot / Batch Number
ℹ	Consults Instructions for Use
▦	QR Code

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

*ForLabUseOnly