

CM 20438 – CHROMOGENIC CRONOBACTER ISOLATION AGAR

INTENDED USE

Recommended for the isolation and identification of Cronobacter sakazakii from food product.

PRODUCT SUMMARY AND EXPLANATION

Enterobacter species are widely distributed in nature occurring in fresh water, soil, and sewage, plants, vegetables, animal and human faeces. *Cronobacter sakazakii has been closely associated with neonatal meningitis and sepsis. Chromogenic Cronobacter isolation Agar is recommended by ISO Committee for the isolation and identification of *C.sakazakii from food samples. The chromogenic substrate (5-Bromo-4-chloro-3-indolyl α -D-glucopyranoside) is cleaved specifically by *C.sakazakii resulting in the formation of blue green colonies. Other organisms, which do not cleave this substrate, produce colourless colonies.

*: Formerly known as Enterobacter sakazakii

COMPOSITION

| Ingredients | Gms / Ltr |
|--|-----------|
| Tryptic digest of casein | 7.000 |
| Sodium chloride | 5.000 |
| Yeast extract | 3.000 |
| Sodium deoxycholate | 0.250 |
| 5-Bromo-4-chloro-3-indolyl α -D-glucopyranoside | 0.15 |
| Ammonium iron(III) citrate | 1.000 |
| Agar | 15.000 |
| Sodium thiosulphate | 1.000 |

PRINCIPLE

Tryptone and yeast 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 inhibits the accompanying gram-positive flora.

INSTRUCTION FOR USE

- Dissolve 32.4 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.
- Mix well and pour into sterile Petri plates.



QUALITY CONTROL SPECIFICATIONS

| | |
|-------------------------------|---|
| Appearance of Powder | : Cream to yellow to pink homogeneous free flowing powder |
| Appearance of prepared medium | : Yellow coloured, clear to slightly opalescent gel forms in Petri plates |
| pH (at 25°C) | : 7.3 ± 0.2 |

INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Recovery | Color of the colony | Incubation Temperature | Incubation Period |
|------------------------|-------|-------------------|-----------|----------|---|------------------------|-------------------|
| Cronobacter sakazakii | 25944 | 50-100 | luxuriant | >=50% | Blue green | 41.5±1°C | 24±2 Hours |
| Cronobacter muytjensii | 51329 | 50-100 | luxuriant | >=50% | Blue green | 41.5±1°C | 24±2 Hours |
| Enterobacter cloacae | 13047 | 50-100 | luxuriant | >=50% | Colourless without green or blue green colour | 41.5±1°C | 24±2 Hours |
| Staphylococcus aureus | 25923 | >=10 ³ | Inhibited | 0% | ----- | 41.5±1°C | 24±2 Hours |

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°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

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

REFERENCES

1. Muytjens H. L., Zanen H. C., Sonderkamp H. J. et al, J. Clin Microbiol 18:115-120, 1983.
2. International Organization for Standardization. Microbiology of the food chain- Horizontal method for the detection of Cronobacter spp. Draft ISO/ TS 22964, 20176 (E).



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|---|---|--|--|---|
|  GMP Good Manufacturing Practices Certified |  Best Before |  QTY. Quantity |  REF Catalogue Number |  Manufacturer |
|  Temperature Unit |  LOT/ B. NO. Lot / Batch Number |  Consults Instructions for Use |  QR Code | |

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
*For Lab Use Only

