

Product Data Sheet

MUG BROMOCRESOL PURPLE BROTH W/ LACTOSE

Product No. GB-DCM-00371-1A

INTENDED USE

For identification of Escherichia coli and coliform bacteria from water by fluorogenic assay method.

PRODUCT SUMMARY

Escherichia coli is a member of the faecal coliform group of bacteria. Detection of E. coli in water indicates faecal contamination. Enzymatic assay have been developed that allow the identification of this organism. MUG-Bromocresol Purple Broth w/Lactose is used for identification of E. coli and coliform bacteria from water samples by a fluorogenic assay method.

Product Specifications

| Ingredients | Gms / Ltr |
|---|------------------|
| Casein enzymic hydrolysate | 17.000 |
| Papaic digest of soyabean meal | 3.000 |
| Lactose | 10.000 |
| Sodium chloride | 5.000 |
| Bromocresol purple | 0.020 |
| Tryptophan | 1.000 |
| 4-Methylumbelliferyl β -D-Glucuronide (MUG) | 0.010 |

PRINCIPLE

The medium consists of casein enzymic hydrolysate and papaic digest of soyabean meal which provide carbon, nitrogen and other essential growth factors. Sodium chloride maintains the osmotic balance of the medium. The medium is supplemented with lactose as a carbon source. Bromocresol purple is a pH indicator which has yellow colour at acidic pH and purple colour at alkaline pH. Due to the fermentation of lactose, acid is produced which turns the medium yellow. Gas in the Durhams tubes after incubation indicates the presence of E. coli and/ or coliform bacteria. To confirm the detection, cover the culture with 5 mm layer of Kovacs indole reagent. Development of a red ring after 1-2 minutes confirms presence of Escherichia coli.

DISPOSAL

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



GOSLAR BIOTECH
Your Partner in Sera

INSTRUCTION FOR USE

- Dissolve 36.03 grams or if desired, suspend 72.06 grams in 1000 ml distilled water to prepare double strength medium.
- Heat if necessary to dissolve the medium completely.
- Dispense into test tubes containing inverted Durhams tubes. Sterilize by autoclaving at 115°C for 20 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium: Purple coloured clear solution without any precipitate.

pH (at 25°C) : 7.2 ± 0

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Acid production | Gas | Fluorescence (under UV) | Indole | Incubation Temperature | Incubation Period |
|------------------------|-------|-------------------|----------------|----------------------------------|-------------------|--------------------------------|--|------------------------|-------------------|
| Escherichia coli | 25922 | 50-100 | Good-luxuriant | Positive reaction, yellow colour | Positive reaction | Positive (by adding 0.2N NaOH) | Positive reaction, red ring at the interface of the medium | 35-37°C | 18-24 Hours |
| Enterococcus faecalis | 29212 | 50-100 | Fair-good | Occasional reaction | Negative reaction | Negative | Negative reaction | 35-37°C | 18-24 Hours |
| Klebsiella pneumoniae | 13883 | 50-100 | Good-luxuriant | Positive reaction, yellow colour | Positive reaction | Negative | Variable reaction | 35-37°C | 18-24 Hours |
| Salmonella Typhimurium | 14028 | 50-100 | Luxuriant | Negative reaction | Negative reaction | Negative | Negative reaction | 35-37°C | 18-24 Hours |

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.

This product is for research use only.

Goslar Biotech, 255A Barking Road East Ham, London E6 1LB, United Kingdom
Email: info@goslarbiotech.com, Website: www.goslarbiotech.com