

CM 20248 – BIFIDOBACTERIUM BROTH

INTENDED USE

For the cultivation of Bifidobacterium species.

PRODUCT SUMMARY AND EXPLANATION

The genus Bifidobacterium is the thirdmostnumerous bacterial population found in the human intestine after Bacteroides and Eubacterium. It is anaerobic bacteria that makes up the gut microbial flora, it resides in the colon and have health benefits for their hosts. Bifidobacteria are also associated with lower incidences of allergies. Bifidobacterium Broth is used for the cultivation and maintenance of Bifidobacterium species. The medium is used exclusively for the cultivation of Bifidobacterium infantis.

COMPOSITION

| Ingredients | Gms / Ltr |
|---------------------------|-----------|
| Tryptone | 20.000 |
| Peptone | 10.000 |
| Yeast extract | 10.000 |
| Tomato juice, solids | 16.650 |
| Dextrose (Glucose) | 20.000 |
| Polysorbate 80 (Tween 80) | 2.000 |

PRINCIPLE

Tryptone,Peptone and yeast extract provides essential growth nutrients. Glucose is the energy source and sodium chloride maintains isotonic conditions. Tomato juice helps in maintaining acidic pH while polysorbate 80 provides fatty acids required for metabolic activity of Bifidobacterium.

INSTRUCTION FORUSE

Dissolve 78.65grams in 1000 ml purified / distilled water.

Heat if necessary to dissolve the medium completely.

Distribute in tubes or flasks as desired.

Sterilize by autoclaving at 15 psi pressure for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

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

Appearance of prepared medium : Amber coloured clear solution in tubes.

pH (at 25°C) : 6.8±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|---------------|------|-------------------|--------|------------------------|-------------------|
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|--------------------------|-------|--------|----------------|---------|-------------|
| Bifidobacterium infantis | 25962 | 50-100 | Good-luxuriant | 35-37°C | 24-48 Hours |
| Bifidobacterium bifidum | 15696 | 50-100 | Good-luxuriant | 35-37°C | 24-48 Hours |
| Bifidobacterium breve | 15698 | 50-100 | Good-luxuriant | 35-37°C | 24-48 Hours |

PACKAGING:

Inpacksizeof500 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

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

REFERENCES

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Atlas R. M. 2004, 3rd Edi. Handbook of Microbiological Media, Parks, L. C. (Ed.), CRC Press, Boca Raton.
3. Bjorksten B., Sepp E., Julge K., Voor T., and Mikelsaar M., 2001, J. Allergy Clin. Microbiol., Volume 108, Issue 4, 516-520.
4. Guarner F., and Malagelada J. R., 2003, The Lancet, Vol. 361, Issue 9356, 8 February 2003, 512-519.



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

*For LabUse Only

