

## CM 20247 – BIFIDOBACTERIUM AGAR

### INTENDED USE

For the cultivation and maintenance of Bifidobacterium species.

### PRODUCT SUMMARY AND EXPLANATION

The genus Bifidobacterium is the thirdmost numerous bacterial populations found in the human intestine after Bacteroides and Eubacterium. It is an 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 Agar is used for the cultivation and maintenance of Bifidobacterium species.

### COMPOSITION

Ingredients	Gms / Ltr
Special peptone	23.000
Sodium chloride	5.000
Dextrose (Glucose)	5.000
Starch, soluble	1.000
L-Cysteine hydrochloride	0.300
Agar	15.000

### PRINCIPLE

Specialpeptone provides essential growth nutrients. Starch acts as protective colloid and shields organisms from harmful substances present in the medium. Glucose is the energy source and sodium chloride maintains isotonic conditions. L-Cysteine hydrochloride helps in creating reduced conditions required for the growth of Bifidobacteria.

### INSTRUCTION FOR USE

- Dissolve 49.3 grams in 1000 ml purified / distilled water.
- Mix well and heat to boiling to dissolve the medium completely.
- Distribute in tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder : Cream to yellow homogeneous free flowing powder.
- Appearance of prepared medium : Amber coloured clear to slightly opalescent gel forms in Petri plates.
- pH (at 25°C) : 6.8±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



Bifidobacterium bifidum	15696	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Bifidobacterium breve	15698	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Bifidobacterium infantis	25962	50-100	Good-luxuriant	>=50%	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.

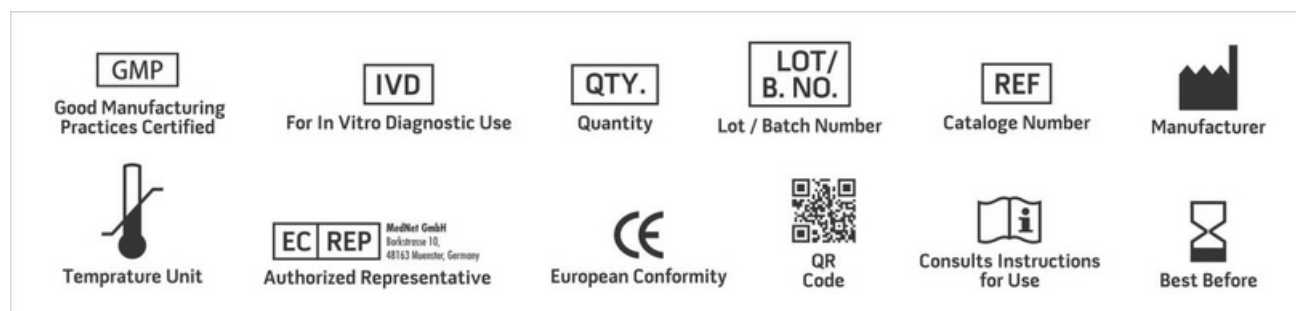
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

Afteruse,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. Björkstén 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

