CM 22,168 – CHROMOGENIC BIFIDOBACTERIUM AGAR

INTENDED USE
For the differentiation of Bifidobacterium and Lactobacillus species.

PRODUCT SUMMARYANDEXPLANATION
Bifidobacterium Agaris used forthe cultivation and maintenance of Bifidobacterium species. After Bacteroides and Eubacterium the genus Bifidobacterium is the third most numerous bacterial populations found in the human intestine. 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 related with lower incidences of allergies.

COMPOSITION

Ingredients	Gms / Ltr
Peptone special	23.000
Sodium chloride	5.000
Milk powder	5.000
Chromogenic mixture	10.480
Agar	16.000

PRINCIPLE
Nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential growth nutrients are provided by peptone special. Osmotic balance maintained by the sodium chloride. Milk powder aids in detecting casein hydrolysis activity which is exhibited by Bifidobacterium breve. A halo zone is observed around the colony in case of casein hydrolysis. Chromogenic mixture's indicator system mixture helps in distinguishing between Bifidobacterium and Lactobacillus species. Green colonies with opaque zone produced by Lactobacillus species. Bifidobacterium infantis produces dark blue to bluish green colonies. Solidifying agent of the media is Agar.

INSTRUCTIONFOR USE
Dissolve 59.48 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 homogeneous free flowing powder
Appearance of prepared medium : Reddish orange coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION
Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Bifidobacterium infantis	25962	50-100	good-luxuriant	>=50%	Dark blue, bluish green	35-37°C	48 Hours
Bifidobacterium breve	15698	50-100	good-luxuriant	>=50%	Red Pink with halo zone	35-37°C	48 Hours
Lactobacillus fermentum	9338	50-100	good-luxuriant	>=50%	Pink without halo zone	35-37°C	48 Hours
Lactobacillus plantarum	8014	50-100	good-luxuriant	>=50%	Green colonies w/hazy background	35-37°C	48 Hours

PACKAGING:

Inpacksizeof100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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. Björkstén B., Sepp E., Julge K., Voor T., and Mikelsaar M., 2001, J. Allergy Clin. Microbiol., Volume 108, Issue 4, 516-520.
2. Guarner F., and Malagelada J. R., 2003, The Lancet, Vol. 361, Issue 9356, 8 February 2003, 512-519.
3. Atlas R. M. 2004, 3rd Edi. Handbook of Microbiological Media, Parks, L. C. (Ed.), CRC Press, Boca Raton.

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

*For Lab Use Only