PRODUCT DATA SHEET

BIFIDOBACTERIUM AGAR TM 1891

For the cultivation and maintenance of *Bifidobacterium* species.

Composition

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

* Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Dissolve 49.3 grams in 1000 ml distilled water. Gently heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plate.
Appearance: Amber coloured clear to slightly opalescent gel
pH (at 25°C): 6.8±0.2

Principle

The genus *Bifidobacterium* is the third most numerous bacterial populations found in the human intestine and helps to contribute to 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. Medium contains special peptone which helps to 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*.

Interpretation

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Test Strains	ATCC	Inoculum (cfu/ml)	Growth
Bifidobacterium bifidum	15696	10^3	Luxuriant
Bifidobacterium breve	15698	10^3	Luxuriant
Bifidobacterium infantis	25962	10^3	Luxuriant

Reference

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.