



Technical Data

HiCrome Bifidobacterium Agar

M1960

Intended use

Recommended for the differentiation of *Bifidobacterium* and *Lactobacillus* species from clinical and non-clinical samples.

Composition**

Ingredients	Gms / Litre
Peptone special	23.000
Sodium chloride	5.000
Milk Protein	5.000
Chromogenic mixture	10.480
Agar	16.000
Final pH (at 25°C)	7.2±0.2

Formula as stated, standardized to suit performance parameters

- Equivalent to Milk powder M-Protein powder

Directions

Suspend 23.000 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 12 lbs pressure for 15 minutes. Cool to 45°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

The genus *Bifidobacterium* is the third most 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, asthma, etc. Bifidobacterium Agar is used for the cultivation and maintenance of *Bifidobacterium* species.

Peptone special provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential growth nutrients. Sodium chloride maintains osmotic balance. M-protein 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. The indicator system in the chromogenic mixture helps in distinguishing between *Lactobacillus* and *Bifidobacterium* species. *Lactobacillus* species usually produce green colonies with opaque zone. *Bifidobacterium infantis* produces dark blue to bluish green colonies. Agar serves as a solidifying agent.

Type of specimen

Clinical samples Faeces Food and dairy samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

Limitations :

Due to nutritional variations, some strains may show poor growth.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

ream to yellow homogeneous free flowing powder

Gelling

firm, comparable with . Agar gel

Colour and Clarity of prepared medium

Reddish orange coloured clear to slightly opalescent gel forms in Petri plates

Reaction

reaction of 5. 5 w v aqueous solution at . p 7.2 .2

Cultural Response

cultural characteristics observed after an incubation at for hours under anaerobic conditions.

Cultural Response

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
Cultural Response <i>Bifidobacterium infantis</i> ATCC 25962		good luxuriant		dark blue bluish green
<i>Bifidobacterium breve</i> ATCC 15698		good luxuriant		red Pink with halo zone
<i>Lactobacillus plantarum</i> ATCC 8014		good luxuriant		Green colonies w/ hazy background
<i>Lactobacillus fermentum</i> ATCC 9338		good luxuriant		Pink without halo zone

Storage and Shelf Life

Store dehydrated media in a tightly closed container and the prepared medium at . Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Use before expiry date on the label.

Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques 4,5 .

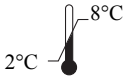
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IVD



CE Marking



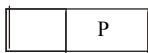
Storage temperature



Do not use if package is damaged



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