

BL Agar

Medium used for the cultivation and enumeration of *Bifidobacterium* spp.

*Equally use with MFDS (MB-B1380K).

• CONTENTS (Liter)

Beef Extract	3.0 g
Liver Extract	5.0 g
Yeast Extract	5.0 g
Proteose Peptone	10.0 g
Tryptone	5.0 g
Soy Peptone	3.0 g
Soluble Starch	0.5 g
Glucose	10.0 g
Dipotassium Phosphate	1.0 g
Monopotassium Phosphate	1.0 g
Magnesium Sulfate	0.2 g
Sodium Chloride	0.01 g
Manganese Sulfate	0.0067 g
L-Cysteine HCl H ₂ O	0.5 g
Ferrous Sulfate	0.01 g
Polysorbate 80	1.0 g
Agar	15.0 g
Final pH = 6.8 ± 0.2 at 25°C	

• PROCEDURE

Suspend 60.23 G of powder in 950 mL of distilled or deionized water. If necessary, adjust pH to 7.2 ± 0.2. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Aseptically add 5% of Horse Blood Defibrinated (MB-H1883) or Sheep Blood Defibrinated (MB-S1876). Mix well. Pour into petri dishes.

• INTERPRETATION

BL Agar is a medium used for the cultivation and enumeration of *Bifidobacterium* spp. Beef extract, liver extract and yeast extract provide growth factors, vitamins and minerals. Peptones and soluble starch provide nitrogen, carbon, vitamins and minerals for growth of microorganisms. Glucose is a carbon source. Phosphates are the buffering agents. Magnesium sulfate, manganese sulfate and ferrous sulfate provide ions, essential electrolytes and minerals. Sodium chloride maintains the osmotic balance. L-Cysteine is the reducing agent. Polysorbate 80 provides fatty acids. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C for 48 - 72 ± 3 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

Prepared medium

Appearance: slightly opalescent

Color: amber / cherry red

Incubation conditions: 36 ± 1°C / 48 - 72 ± 3 hours under anaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Bifidobacterium longum</i>	15707	50-100	good	creamy white to reddish brown colony
<i>Bifidobacterium bifidum</i>	29521	50-100	good	creamy white to reddish brown colony
<i>Bifidobacterium breve</i>	15701	50-100	good	creamy white colony

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Ronald M. Atlas(2006), Handbook of Microbiological media for the examination of Food, Second Edition.
2. Refer to the MFDS.

• PACKAGE

Cat. No : MB-B1380 BL Agar	500 G
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• MICROBIAL CULTURE IMAGES



Bifidobacterium longum
ATCC 15707 (50-100 CFU)



Bifidobacterium bifidum
ATCC 29521 (50-100 CFU)



Bifidobacterium breve
ATCC 15701 (50-100 CFU)

Incubation conditions : $36 \pm 1^{\circ}\text{C}$ / 48 - 72 ± 3 hours under anaerobic condition