

46379 Meat Liver Agar

Meat Liver Agar is recommended for the cultivation of anaerobic microorganisms, specially for the sulphite reducing Clostridia and *Clostridium perfringens* in water and milk.

Composition:

Ingredients	Grams/Litre
Meat liver base	20.0
D(+)-Glucose	0.75
Starch	0.75
Sodium sulfite	1.2
Ammonium ferric citrate	0.5
Agar	11.0
Final pH 7.6 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C. Prepared medium appears yellow colored and is a clear to slightly opalescent solution.

Directions:

Dissolve 34.2 g in 1 litre distilled water. Sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:

The meat liver base provides adequate degree of anaerobiosis besides provision of rich supply of nutrients like organic nitrogen. This enables even strict and fastidious anaerobes to grow well. Glucose is the carbohydrate source and starch is added to absorb any toxic metabolic by-products. *Clostridium* species reduce sulfite present in the medium to hydrogen sulfide (H₂S), which reacts with ammonium ferric citrate to the black colored FeS. The agar medium is inoculated either by pour plate technique or by surface spreading methods.

Cultural characteristics after 24-48 hours at 35°C in anaerobic environment.

Organisms (ATCC)	Growth	H ₂ S production (black colonies)
<i>Clostridium perfringens</i> (12924)	+++	+
<i>Clostridium tetani</i> (10779)	+++	+
<i>Clostridium botulinum</i> (25763)	+++	+
<i>Escherichia coli</i> (25922)	+++	-
<i>Proteus mirabilis</i> (25933)	+++	-/weak
<i>Bacteroides vulgatus</i> (8482)	+++	-

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

