

## M2178 Mycoplasma agar base

Mycoplasma Agar Base with the addition of supplements is used for the isolation and cultivation of *Mycoplasma*. Mostly the *Mycoplasma* species are aerobic or facultatively anaerobic, but some are microaerophilic.

### Composition:

Ingredients	Grams/Litre
Beef Heart Infusion (from 250g)	6.0
Peptic Digest of Animal Tissue	10.0
Sodium Chloride	5.0
Agar	15.0
Final pH 7.8 +/- 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.

Appearance: Yellow colored, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Yellow colored, clear to slightly opalescent gel forms in Petri plates or tubes.

### Directions:

Suspend 36 g of Mycoplasma Agar Base in 700 ml of distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes. Cool to 45°C and aseptically add a 300 ml 1% solution of Horse Serum to the agar base or add 10 vials of Mycoplasma Enrichment Supplement (M6930) to the Mycoplasma Agar Base. Mix well before dispensing. Dispense into petri plates or tubes. Ascitic fluid can be used instead of Horse Serum.

The Mycoplasma Enrichment Supplement can be replaced with a sterile filtered solution of 20.0 ml H6762 Horse serum, 10.0 ml of Yeast Extract, 25 mg of Thallous acetate and 20,000 I.U. of Penicillin G. Mix well before dispensing. Dispense into petri plates or tubes.

**Note:** After inoculation, the plates or tubes should be incubated in an atmosphere containing 5-10% carbon dioxide. They should be examined after 48 hours, but they should not be discarded as negative until after a three weeks incubation.

### Principle and Interpretation:

For the cultivation of *Mycoplasma* the medium ingredients should be free of any toxic substances even in small amounts. The medium contains beef heart infusion and peptic digest of animal tissue which supply nitrogen. Sodium chloride is for the osmotic balance. Horse Serum is needed for the growth of the *Mycoplasma*. The addition of supplement helps to restrict the growth of contaminating organisms.

Cultural characteristics after 48 hours at 35°C.

Organisms (ATCC)	Growth
<i>Mycoplasma bovis</i> (25523)	+++
<i>Mycoplasma gallinarium</i> (19708)	+++
<i>Mycoplasma pneumoniae</i> (15531)	+++
<i>Streptococcus pneumoniae</i> (6303)	+++



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#### References:

1. Morton, Smith and Leverman, 1951, Am. J. Syphilis Gonorrhea. Venereal Diseases, 35: 361.
2. American Type Culture Collection, Manassas, Va., U.S.A.

#### **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.

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