

TAP (Tris Acetate Phosphate) Broth



Medium used for the cultivation and enumeration of algae.

• CONTENTS (Liter)

Ammonium Chloride	0.375 g
Magnesium Sulfate	0.1 g
Calcium Chloride	0.05 g
Dipotassium Phosphate	0.108 g
Monopotassium Phosphate	0.054 g
Tris Base	2.42 g
Na ₂ EDTA	0.05 g
Zinc Sulfate	0.022 g
Boric Acid	0.0114 g
Manganese Chloride	0.005 g
Ferrous Sulfate	0.005 g
Cobalt Chloride	0.0016 g
Copper Sulfate	0.0016 g
Ammonium Molybdate	0.0011 g
Final pH = 7.0 ± 0.2 at 25°C	

• PROCEDURE

Suspend 3.20 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Add 1 mL of Glacial Acetic Acid supplement (MB-G0743). Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

Glacial Acetic Acid supplement

1 vial contents

Glacial Acetic Acid 15.0 mL

• INTERPRETATION

TAP (Tris Acetate Phosphate) Broth is a medium used for the cultivation and enumeration of algae. Ammonium chloride provides nitrogen. Magnesium sulfate, calcium chloride, zinc sulfate, boric acid, manganese chloride, ferrous sulfate, cobalt chloride, copper sulfate and ammonium molybdate provide the essential electrolytes and minerals. Dipotassium phosphate, monopotassium phosphate and tris base are the buffering agents. Na₂EDTA is a strong chelating agent for heavy metals.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 20 - 25°C for 3 - 7 days under light. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: moist appearance, with a tendency to clump

Color: light brown with precipitates

Prepared medium

Appearance: slightly opalescent with brown precipitates

Color: light brown

Incubation conditions: 20 - 25°C / 3 - 7 days under light

Microorganism	ATCC	Inoculate CFU	Growth
<i>Chlamydomonas reinhardtii</i>	18798	heavy	good
<i>Chlorella vulgaris</i>	30821	heavy	good

• STORE

The powder is very hygroscopic. Store the powder at 2 - 8°C, 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. Bold H.C. (1949) The morphology of *Chlamydomonas chlamydogama* sp. nov. Bull. Torrey Bot. club. 76, 101-108.

• PACKAGE

Cat. No : MB-T0712 TAP (Tris Acetate Phosphate) Broth	500 G
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