TRIS acetate phosphate (TAP) medium

Steven Burgess

Abstract

TAP medium is the most widely used for growth of the green alga *Chlamydomonas reinhardtii*. Note the presence of acetate effects the photosynthetic ability of the alga and minimal medium should be used instead if quantifying effects of mutations or inhibitors on photosynthesis.

Source:

from Gorman, D.S., and R.P. Levine (1965) *Proc. Natl. Acad. Sci. USA* **54**, 1665-1669.

http://www.chlamycollection.org/TAP.html

Citation: Steven Burgess TRIS acetate phosphate (TAP) medium. **protocols.io** dx.doi.org/10.17504/protocols.io.e95bh86
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Guidelines

From Gorman, D.S., and R.P. Levine (1965) *Proc. Natl. Acad. Sci. USA* **54**, 1665-1669.

This is probably the most widely-used medium at present for experimental work.

Protocol

Step 1.

TRIS base

AMOUNT
2 g Additional info:

Step 2.

TAP Salts

AMOUNT
25 ml Additional info:

PROTOCOL

. TRIS Acetate Phosphate Salts (x40)

CONTACT: Steven Burgess
Step 2.1.

Ammonium chloride

NH_4Cl

AMOUNT
15 g Additional info:
Step 2.2.

Magnesium sulphate

$MgSO_4 . 7H_2O$

AMOUNT
4 g Additional info:
Step 2.3.

Calcium chloride

$CaCl_2 . 2H_2O$

AMOUNT
2 g Additional info:
Step 2.4.

Distilled H_2O

AMOUNT
1 L Additional info:
Step 3.

Phosphate Solution

PROTOCOL

. Phosphate solution

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Step 3.1.

Potassium hydrogen phosphate

K_2HPO_4

AMOUNT
29 g Additional info:

Step 3.2.

Potassium dihydrogen phosphate

KH_2PO_4

AMOUNT
14 g Additional info:

Step 4.

Glacial acetic acid

AMOUNT
1 ml Additional info:

Step 5.

Hutner's Trace Elements

AMOUNT
1 ml Additional info:

Step 6.

Distilled dH_2O

NOTES
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Add up to 1L

Step 7.

Autoclave

NOTES
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For solid medium add 15g of agar per L.