YEP Broth, Modified

M1827

YEP Broth, Modified recommended for cultivation of *Agrobacterium* species and other soil microorganisms.

Composition**

Ingredients	Gms / Litre
Peptone	10.000
Yeast extract	10.000
Sodium chloride	5.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 25 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and dispense as desired.

Principle And Interpretation

YEP Broth is based on the formula described by Tianayan et.al.(1) YEP Broth modified is widely used for the cultivation of *Agrobacterium* species and other soil microorganisms.

Agrobacterium is a genus of Gram negative bacteria, soil borne pathogen responsible for crown-gall disease, affecting many higher species of plants. *Agrobacterium* strains used in experiments on YEP broth during plant functional genomic studies. Rhizobial strains is cultured in YEP broth.

Yeast extract and peptone provide nitrogenous compounds, vitamin B complex and other growth nutrients for the growth of *Agrobacterium* . Sodium chloride maintains the osmotic balance of the medium.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Yellow coloured clear solution in tubes

Reaction
Reaction of 2.5% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH
6.80-7.20

Cultural Response
M1827: Cultural characteristics observed after an incubation at 35-37°C for 18- 24 hours.

Organism	Inoculum (CFU)	Growth
Cultural Response		
Escherichia coli ATCC 25922	50-100	good-luxuriant
Aeromonas veronii	50-100	good-luxuriant
Staphylococcus aureus ATCC 25923	50-100	good-luxuriant
Agrobacterium tumefaciens ATCC 33970	50-100	luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

1.Tianyan Song, Claudia Toma, Noboru Nakasone and Masaaki Iwanaga. (2004). Aerolysin is activated by metalloprotease in Aeromonas veronii biovar sobria J Med Microbiol 53, 477-482

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