



Van Niel's Yeast Broth (ATCC Medium 112)

M1961

Recommended for cultural isolation of *Heliobacterium chlorum* .

Composition**

Ingredients	Gms / Litre
Dipotassium hydrogen phosphate	1.000
Magnesium Sulphate	0.500
Yeast Extract	10.000
Final pH (at 25°C)	7.1±0.1

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 11.50 grams in 1000ml distilled water .Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15lbs (121°C) for 15 minutes. Dispense as desired.

Principle And Interpretation

Heliobacteria are photoheterotrophic, requiring organic carbon sources. They convert light energy into chemical energy by photosynthesis. And even though they are phototrophic they can grow without light by fermentation of pyruvate. They are found in soils(1). This medium is recommended by ATCC for the cultivation and isolation of *Heliobacterium chlorum* (2) .

Yeast extract in the medium is the source of nitrogen and growth factors required for the growth of microorganisms. Phosphates buffer the medium.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Light amber coloured clear solution in tubes

Reaction

Reaction of 1.11% w/v aqueous solution at 25°C. pH : 7.1±0.1

pH

7.00-7.20

Cultural Response

Cultural characteristics observed under anaerobic conditions after an incubation at 25-30°C for 48-72 hours.

Cultural Response

Organism	Inoculum (CFU)	Growth
Cultural Response <i>Heliobacterium chlorum</i> ATCC 35205	50-100	good

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.Gest, H., Favinger, J. L. (1983). *Heliobacterium chlorum*, a anoxygenic brownish-green photosynthetic bacterium containing a new form of bacteriochlorophyll. Arch.Microbiol. 136 : 11-16.
- 2.American Type Culture Collection. Catalogue of Bacteria and phages. 18th Edition 1992.

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