HP6 Agar Base

M1587

HP6 Agar Base is used for the isolation and cultivation of *Cytophaga, Herpetosiphon Saprospira* and *Flexithrix* species.

Composition**

Ingredients	Gms / Litre
Sodium glutaminate	10.000
Yeast extract	1.000
Cyanocobalmin	0.0005
Magnesium sulphate heptahydrate	1.000
Agar	15.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 27 grams in 900 ml distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Aseptically add sterile glucose solution (5gm/100ml). Mix thoroughly. Pour into sterile Petri plates.

Principle And Interpretation

The Cytophagales appear to be distantly related to the *Bacteroides* group and are by far the most common of all gliding bacteria. The genera *Cytophaga, Herpetosiphon Saprospira* and *Flexithrix* come under the order Cytophagales (1). Cytophaga is a soil and water organism that lives on cellulose, chitin and agar. Many bacteria of the Cytophaga group produce heavy growth on HP6 Agar Base (2). All known Cytophagales are restricted to pH values between 6 and 8. Their temperature range is wide, from about 0°C to more than 40°C. On plates, most strains will grow more or less at 30°C. In contrast, liquid cultures of many strains, particularly those isolated from aquatic environments, grow only, or grow much better, at lower temperatures (usually between 18 and 26°C).

Addition of a sugar, e.g. glucose may stimulate growth of *Cytophaga* considerably and may even be a prerequisite for cultivation. When glucose is used in a medium, care has to be taken to sterilize the glucose separately, either by filtration or by autoclaving since cellulose-degrading Cytophagales are extremely sensitive to toxic products arising when glucose is autoclaved together with other medium compounds.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Gelling
Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium
Light yellow coloured, clear to slightly opalescent gel forms in Petri plates

Reaction
Reaction of 2.7% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH
7.00-7.40

Cultural Response
M1587: Cultural characteristics observed after an incubation at 25-30°C for 18-24 hours.

Organism	Growth
Cultural Response	

Cytophaga heparina ATCC 13125 luxuriant
Flexithrix dorotheae ATCC 23163 luxuriant

Storage and Shelf Life

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

Reference

1. Christensen P. J., 1977, The History of Biology and Taxonomy of the Cytophaga group, Can. J. Microbiol., Vol. 23, pp. 1599 1653
2. Atlas R. M., 2004, Handbook of Microbiological Media, Lawrence C. Parks (Ed.), 3rd Edition, CRC Press,

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