

Product Information

78996 HiFluoro™ Pseudomonas Agar Base (Pseudomonas Agar Base HiFluoro)

HiFluoro Pseudomonas Agar Base is used as a selective medium for the isolation of *Pseudomonas aeruginosa* from pus, sputum and drains etc. *Pseudomonas aeruginosa* breaks the fluorogenic compound to release the fluorogen which produces a visible fluorescence under long wave UV light.

Composition:

Ingredients	Grams/Litre
Pancreatic digest of gelatin 18.0g/l	18.0
Magnesium chloride 1.4g/l	1.4
Potassium sulfate 10.0g/l	10.0
Cetrimide 0.3g/l	0.3
Fluorogenic mixture	2.05
Agar	15.0
Final pH 7.2 +/-0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions :

Suspend 46.75 g in 1000 ml distilled water containing 10 ml glycerol. Boil to dissolve the medium completely. Sterilise by autoclaving at 121°C for 15 min. Mix well and pour into sterile petri plates.

Principle and Interpretation:

HiFluoro Pseudomonas Agar Base is formulated based on the formula described by King et al. (1) expect fluorogenic mixture.

Pancreatic digest of gelatine serve as source of nitrogen, carbon, amino acids and other essential growth nutrients. Magnesium chloride and Potassium sulfate stimulate pyocyanin production. Agar is the solidifying agent. Cetrimide (Cetyltrimethylammonium bromide) is incorporated in the medium to inhibit bacteria other than *Pseudomonas aeruginosa*. It acts as a quaternary ammonium compound, cationic detergent which causes nitrogen and phosphorus to be released from bacterial cells other than *Pseudomonas aeruginosa*. *Pseudomonas aeruginosa* breaks the fluorogenic compound to release the fluorogen which produces a visible fluorescence under long wave UV light.

Cultural characteristics after 24-48 hours at 35-37°C.

Organisms (ATCC)	Growth	Fluorescence at 366 nm
<i>Pseudomonas aeruginosa</i> (27853)	+++	+
<i>Pseudomonas maltophilia</i> (13637)	-	-
<i>Escherichia coli</i> (25922)	-	-
<i>Staphylococcus aureus</i> (25923)	-	-

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References:

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