Photobacterium HiVeg™ Broth MV783

Photobacterium HiVeg Broth is used for cultivation and demonstration of luminescence of photobacteria.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	5.0
Yeast extract	2.5
Sodium chloride	30.0
Ammonium chloride	0.3
Magnesium sulphate	0.3
Ferric chloride	0.01
Calcium carbonate	1.0
Monopotassium dihydrogen phosphate	3.0
Sodium glycerophosphate	23.5

Final pH (at 25°C) 7.0 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 65.61 grams in 1000 ml distilled water. Heat just to boiling. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Before pouring mix well to evenly distribute slight precipitate formed.
NOTE: Due to presence of calcium carbonate the prepared medium forms opalescent solution with white precipitate

Principle and Interpretation :

Photobacterium HiVeg Broth is prepared by using HiVeg hydrolysate which is free of BSE/TSE risks. Photobacterium HiVeg Broth is the modification of Photobacterium Broth which is prepared based on the formulations described by Daudoroff (1) and Giese (2) for the cultivation and demonstration of luminescence of photobacteria.
HiVeg hydrolysate and yeast extract provide nitrogenous compounds, carbon, sulphur, trace nutrients, vitamin B complex, which is essential for the growth of photobacteria. Potassium dihydrogen phosphate helps in maintaining the buffering capacity of the medium. Chlorides, sulphate, carbonate and also the glycerophosphate helps in luminescence. The intensity of luminescence is related to the aeration of culture. The greater the oxygen supply, the greater will be luminescence.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV783 HiVeg hydrolysate	**M783** Casein enzymic hydrolysate

Recommended for	:	Cultivation and demonstration of luminescence of photobacteria.
Reconstitution	:	65.61 g/l
Quantity on preparation (100g)	:	1.52 L
pH (25°C)	:	7.0 ± 0.2
Supplement	:	None
Sterilization	:	121°C / 15 minutes.

Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Quality Control :

Appearance of powder
Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Colour and Clarity
Light amber coloured clear to slightly opalescent solution with heavy white precipitate.
Reaction
Reaction of 6.56% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C
Cultural Response
Cultural characteristics observed after an incubation at 25 - 30°C for 18 - 24 hours.

Organisms (ATCC)	Growth	Luminescence
Lucibacterium harveyi (14126)	good-luxuriant	+
Vibrio fischeri (7744)	good-luxuriant	+

References :

1. Daudoroff, 1942, J. Bact., 44 : 451.
2. Giese, 1943, J. Bact., 46 : 323.

◉ Prepared from GMO free Vegetable proteins replacing Animal based peptones. Freedom from BSE/TSE worries.

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