

Fermentation HiVeg™ Medium for Staphylococcus and Micrococcus MV827

Fermentation HiVeg Medium for Staphylococcus and Micrococcus is used for studying fermentation by *Staphylococcus* and *Micrococcus* species.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	10.0
Yeast extract	1.0
Glucose	10.0
Bromo cresol purple	0.04
Agar	2.2

Final pH (at 25°C) 7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 23.2 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow tubed medium to cool in an upright position.

Principle and Interpretation :

This medium is prepared by using HiVeg hydrolysate which is free from BSE/TSE associated risks. Fermentation HiVeg Medium for *Staphylococcus* and *Micrococcus* is recommended for differentiation of these two organisms on the basis of fermentation reaction. *Staphylococcus* produces acid from glucose anaerobically whereas *Micrococcus* fails to do so (1).

HiVeg hydrolysate and yeast extract provide necessary nitrogenous nutrients for the growth of organisms. Glucose is the fermentable carbohydrate source in the medium. Bromo cresol purple is the pH indicator which is yellow in the acidic range. The colour of medium changes to yellow on fermentation of glucose due to the production of acid. Incorporation of little agar in this medium helps to create anaerobic condition in the depths of the tubes.

Quality Control :

Appearance of powder

Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Product Profile :

Vegetable based (Code MV)Ⓞ	Animal based (Code M)
MV827 HiVeg hydrolysate	M827 Casein enzymic hydrolysate

Recommended for : Studying fermentation by *Staphylococcus* and *Micrococcus* species.

Reconstitution : 23.2 g/l

Quantity on preparation (500g): 21.55 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.

Gelling

Semisolid, comparable with 0.22% Agar gel.

Colour and Clarity

Purple coloured, clear to slightly opalescent gel forms in tubes as butts.

Reaction

Reaction of 2.32% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours when incubated anaerobically.

Organisms (ATCC)	Inoculum (CFU)	Growth	Acid production
<i>Micrococcus luteus</i> (10240)	10 ²	good-luxuriant	-
<i>Staphylococcus aureus</i> (25923)	10 ²	good-luxuriant	+

Key : + = positive reaction, yellow colour

- = negative reaction, purple colour

References :

1. Finegold S.M. and Martin W.J., 1982, Diagnostic Microbiology, 6th ed., The C.V. Mosby Co., St.Louis.