

Alternative Thioglycollate HiVeg™ Medium

MV010

Alternative Thioglycollate HiVeg Medium is recommended for sterility testing of certain biological products which are turbid or viscous.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	15.0
Yeast extract	5.0
Dextrose	5.5
Sodium chloride	2.5
L-Cystine	0.5
Sodium thioglycollate	0.5

Final pH (at 25°C) 7.1 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 29 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Distribute into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Note: It is preferable to use freshly prepared medium, alternatively it should be boiled and cooled just once prior to use since due to reheating toxic oxygen radicals are formed.

Principle and Interpretation :

This medium is prepared by completely replacing animal peptones with vegetable peptones to avoid BSE/TSE risk. Alternative Thioglycollate HiVeg Medium is the modification of Alternative Thioglycollate Medium formulated as described in N.I.H memorandum (1) and is generally used for cultivation of anaerobes and sterility testing of certain biological products used in industrial set ups.

Alternative Thioglycollate HiVeg Medium contains sodium thioglycollate that can neutralize the bacteriostatic effect of mercurial preservatives. Absence of agar makes it suitable for testing viscous materials and devices having tubes with small lumina. HiVeg hydrolysate, yeast extract, dextrose, L-Cystine provides nitrogenous and carbonaceous compounds, vitamin B complex, trace elements and other essential growth nutrients. Sodium thioglycollate and L-Cystine lower the oxidation - reduction potential of the medium by removing oxygen to maintain a low Eh.

Quality Control :

Appearance of powder

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

Colour and Clarity

Yellow coloured clear solution without any precipitate.

Reaction

Reaction of 2.9% w/v aqueous solution is pH 7.1 ± 0.2 at 25°C.

Product Profile :	
Vegetable based (Code MV)Ⓢ	Animal based (Code M)
MV010 HiVeg hydrolysate	M010 Casein enzymic hydrolysate
Recommended for	: Sterility testing of certain biological products which are turbid or viscous.
Reconstitution	: 29.0 g/l
Quantity on preparation (500g)	: 17.24 L
	(100g) : 3.44 L
pH (25°C)	: 7.1 ± 0.2
Supplement	: None
Sterilization	: 121°C / 15 minutes.
Storage	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Cultural Response

Cultural characteristics observed after an incubation at 30-35°C for 24-72 hours.

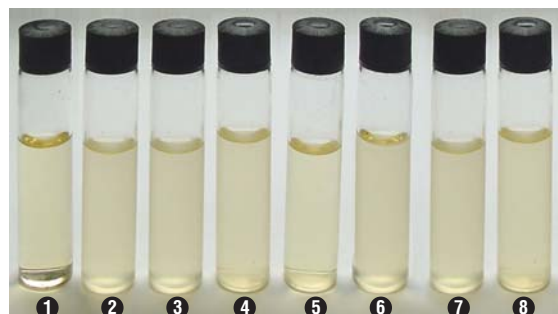
Organisms (ATCC)	Inoculum (CFU)	Growth
# <i>Candida albicans</i> (10231)	10 ² - 10 ³	luxuriant
* <i>Bacteroides vulgatus</i> (8482)	10 ² - 10 ³	luxuriant
* <i>Clostridium sporogenes</i> (11437)	10 ² - 10 ³	luxuriant
<i>Bacillus subtilis</i> (6633)	10 ² - 10 ³	luxuriant
* <i>Bacteroides fragilis</i> (25285)	10 ² - 10 ³	luxuriant
<i>Micrococcus luteus</i> (9341)	10 ² - 10 ³	luxuriant
<i>Neisseria meningitidis</i> (13090)	10 ² - 10 ³	luxuriant
(25923)	10 ² - 10 ³	luxuriant
<i>Streptococcus pyogenes</i> (19615)	10 ² - 10 ³	luxuriant

Key : * = Incubated anaerobically

= incubated at 25-30°C for 2-7 days.

References :

1. N.I.H Memorandum, 1955 : Culture media for sterility Tests, 4th Revision.



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|----------------------------------|----------------------------------|
| 1. Control | 5. <i>Bacteroides vulgatus</i> |
| 2. <i>Streptococcus pyogenes</i> | 6. <i>Candida albicans</i> |
| 3. <i>Staphylococcus aureus</i> | 7. <i>Bacteroides fragilis</i> |
| 4. <i>Bacillus subtilis</i> | 8. <i>Clostridium sporogenes</i> |