

Reinforced Clostridium Medium(RCM)

Catalog : HB0316-11

Reinforced Clostridium Medium is used for the cultivation and counting of Clostridium.

Approximate Formula:

Ingredients	gm/liter
Peptic digest of animal tissue	10.0
Beef extract	10.0
Yeast extract	3.0
Glucose	5.0
Soluble starch	1.0
Sodium chloride	5.0
Sodium acetate	3.0
L-Cysteine hydrochloride	0.5
Agar	0.5

Final pH6.8±0.2 at 25℃

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 38.0g of the medium in one liter of deionized or distilled water. Mix well and heat with frequent agitation. Dispense into test tubes. Sterilize in an autoclave at 121℃ (15 lbs.) for 15 minutes.

Principle and Interpretation:

Peptic digest of animal tissue, beef extract, yeast extract, soluble starch and L-cysteine hydrochloride provide carbon source, nitrogen source, vitamins and growth factors; Glucose is fermentable sugar; Sodium chloride maintains equilibrium osmotic pressure; Sodium acetate can inhibit Gram-negative bacteria; Trace agar (0.5g) increase the stability of the reducing environment and prevented liquid convection, prevent the diffusion of carbon dioxide, oxygen and reducing products, which is conducive to the formation of anaerobic environment. Unmotile bacteria grow as granules or strips in this medium and can be counted; Motility bacteria usually grow turbid in the medium and generally cannot be counted.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent liquid.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Reinforced Clostridium Medium must be stored tightly capped in the original container at 5-30℃. The dehydrated medium has a shelf life of 3 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8℃.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 30-35℃ for 24-72 h.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Remarks
<i>Clostridium sporogenes</i>	CMCC 64941	10-100	Luxuriant	Turbid
<i>Clostridium perfringens</i>	ATCC 13124	10-100	Luxuriant	Turbid

References

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The nationalformulary 26, Supp. 1, 8-1-08, online. United States Pharmacopeial Convention, Inc., Rockville, Md.
2. European Directorate for the Quality of Medicines and Healthcare. 2008. The European pharmacopoeia, 6th ed., Supp. 1, 4-1-2008, online. European Directorate for the Quality of Medicines and Healthcare, Council of Europe, 226 Avenue de Colmar BP907-, F-67029 Strasbourg Cedex 1, France.
3. Japanese Ministry of Health, Labour and Welfare. 2006. The Japanese pharmacopoeia, 15th ed., online. Japanese Ministry of Health, Labour and Welfare.