

Violet Red Bile Dextrose Agar(VRBDA)

Catalog :HB0116-6-500

Violet Red Bile Dextrose Agar is used for counting of *Enterobacteria* and identification of *Enterobacteriaceae*.

Approximate Formula:

Ingredients	gm/liter
Peptic digest of animal tissue	7.0
Yeast extract	3.0
Sodium chloride	5.0
Glucose	10.0
Bile salts	1.5
Crystal violet	0.002
Neutral Red	0.03
Agar	13.0
Final pH7.3±0.2 at 25°C	

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

Directions:

Suspend 39.5g of the medium in one liter of deionized or distilled water. Heat to dissolved. Boil for no more than 2 minutes. Cool to about 50°C, pour into sterile petri dishes. DO NOT AUTOCLAVE.

Principle and Interpretation:

Peptone and yeast powder provided carbon and nitrogen sources and trace elements. Glucose is a fermentable sugar; Sodium chloride maintains equilibrium osmotic pressure; Bile salts and crystal violet inhibit gram-positive bacteria, especially gram-positive bacteria and *Streptococcus faecalis*; Neutral red is a pH indicator. Agar is the solidifying agent.

Appearance:

Dehydrated medium is a free-flowing reddish powder. The prepared medium is a kind of violet red transparent gel.

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:

Violet Red Bile Dextrose Agar must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1°C for 18-24 hours..

Microorganism	Strains Number	Inoculum (CFU)	Growth	Recovery	Remarks
<i>Enterococcus faecalis</i>	ATCC 29212	/	Inhibited	/	/
<i>Escherichia coli</i>	ATCC 25922	20-200	Luxuriant	≥70%	Purple red with red precipitation around colonies
<i>Salmonella typhimurium</i>	ATCC 14028	20-200	Luxuriant	≥70%	Purple red with red precipitation around colonies
<i>Shigella flexneri</i>	ATCC 12022	20-200	Luxuriant	≥70%	Purple red with red precipitation around colonies

References:

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The national formulary 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 Medicinesand Healthcare, Council of Europe, 226 Avenue de Colmar BP907-, F-67029 Strasbourg Cedex 1,France.
3. Mossel. 1985. Int. J. Food Microbiol. 2:27.