

Violet Red Bile Glucose Agar (VRBG)



Medium used for the isolation and identification of Enterobacteriaceae in foods and pharmaceutical products.

*Equally use with KP (MB-V1059P), USP and EP.

• CONTENTS (Liter)

Yeast Extract	3.0 g
Gelatin Peptone	7.0 g
Bile Salts No.3	1.5 g
Sodium Chloride	5.0 g
Glucose	10.0 g
Neutral Red	0.03 g
Crystal Violet	0.002 g
Agar	15.0 g
Final pH = 7.4 ± 0.2 at 25°C	

• PROCEDURE

Suspend 41.53 G of powder to 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

• INTERPRETATION

Violet Red Bile Glucose Agar is a medium used for the isolation and identification of Enterobacteria in foods and pharmaceutical products. Yeast extract and gelatin peptone provide the nitrogen and vitamin sources. Bile salts No.3 and crystal violet inhibit the growth of Gram-positive bacteria. Sodium chloride maintains the osmotic balance. Glucose is the fermentable carbohydrate. Neutral red is a pH indicator. Glucose fermentation by the Enterobacteria causes an acidification of the medium with consequent color change of the indicator towards pink-red and the bile salts precipitation. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 30 - 35°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: reddish-beige

Prepared medium

Appearance: slightly opalescent

Color: reddish-purple

Incubation conditions: 30 - 35°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	8739	50-100	good	pink-red colony with bile precipitates
<i>Pseudomonas aeruginosa</i>	9027	50-100	good	-
<i>Staphylococcus aureus</i>	6538	≥10 ³	inhibited	-

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. ISO 4832: 1991. Microbiology - General guidance for the enumeration of coliforms-colony count technique.
2. Mossel, D.A.A., M.J. Koopman, and E. Jongerijs (1967). Enumeration of *Bacillus cereus* in foods. *Appl. Microb.* 15 (3): 650-653.
3. ISO 7402: 1993. Microbiology - General guidance for the enumeration of Enterobacteriaceae without resuscitation – MPN technique and colony count technique.
4. ISO 8523: 1991. Microbiology - General guidance for the detection of Enterobacteriaceae with pre-enrichment.
5. Refer to the KP, USP and EP.

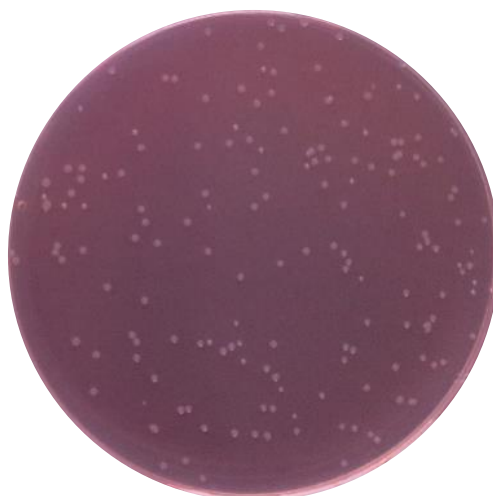
• PACKAGE

Cat. No : MB-V1059 Violet Red Bile Glucose Agar (VRBG)	500 G
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• MICROBIAL CULTURE IMAGES



Escherichia coli ATCC 8739



Pseudomonas aeruginosa ATCC 9027

Incubation conditions : 30 - 35°C / 18 - 24 hours