

Phenylalanine Agar



Medium used for the identification and determination of Enterobacteriaceae on the basis of phenylalanine deaminase test.

• CONTENTS (Liter)

Yeast Extract	3.0 g
Sodium Chloride	5.0 g
DL-Phenylalanine	2.0 g
Disodium Phosphate	1.0 g
Agar	15.0 g
Final pH = 7.3 ± 0.2 at 25°C	

• PROCEDURE

Suspend 26.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes. Arrange tubes in a slanted position.

• INTERPRETATION

Phenylalanine Agar is a medium used for the identification and determination of Enterobacteriaceae on the basis of phenylalanine deaminase test. Yeast extract provides necessary nutrients and vitamin B complex. Sodium chloride maintains the osmotic balance. DL-Phenylalanine serves as a substrate for diaminase. Disodium phosphate is the buffering agent. Agar is the solidifying agent.

• TECHNIC

Inoculate the tube to stab the bottom and streaking the specimen on the slant surface using a sterile needle. Incubate at 35 ± 2°C for 18 - 24 hours. Add 3 - 5 drops of Ferric Chloride 10% (MB-F1870). A positive test is indicated by the formation of a characteristic green color. Proteus and Providencia groups give a positive reaction in 1 - 5 minutes. Other members of Enterobacteriaceae give negative reactions. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance : slightly opalescent

Color: light amber

Incubation conditions: 35 ± 2°C / 18 - 24 hours / loosened cap

Microorganism	ATCC	Growth	Characteristics
<i>Proteus mirabilis</i>	25933	good	+ (green coloration)
<i>Proteus vulgaris</i>	13315	good	+ (green coloration)
<i>Escherichia coli</i>	25922	good	-
<i>Enterobacter aerogenes</i>	13048	good	-

• 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 or until signs of deterioration are evident. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Ann. Inst. Pasteur. (1954) 87: 375-386.
2. Pub. Hlth Lab. (1957) 15: 153

• PACKAGE

Cat. No : MB-P1039 Phenylalanine Agar	500 G
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