

PRODUCT INFORMATION

Phenylalanine Agar

Cat. No. P16-106

DESCRIPTION

Phenylalanine Agar is a solid medium used for differentiating *Proteus*, *Providencia* and *Morganella* species from other Enterobacteriaceae, based on the deamination of phenylalanine to phenylpyruvic acid by enzymatic activity. The formula is prepared according to Ewing et al. (1957). Some strains of *Enterobacter* and a few non-fermenting Gram-negative bacilli are also capable of deaminating phenylalanine.

DL-Phenylalanine is deaminated to phenylpyruvic acid. Yeast extract provides vitamins, particularly of the B-group, and other nutrients for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Sodium phosphate is the buffer and Bacteriological agar is the solidifying agent.

FORMULA (g/L)

Agar	9.5 g	Sodium Chloride	5.5 g
Yeast extract	5.0 g	L-Phenylalanine	2.0 g
Sodium Phosphate Dibasic	1.0 g		

Final pH: 7.3 ± 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Suspend 23 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into tubes and sterilize in autoclave at 121 °C for 15 minutes. Allow to cool in a slanted position.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and beige.
2. Visually the prepared medium is amber, slightly opalescent, and without rests.
3. Expected cultural response after 18-24 hours at 35 °C ± 2°C.

ORGANISM	GROWTH	CHARACTERISTIC REACTION
<i>Klebsiella aerogenes</i> ATCC 13048	Good Growth	Phenyl pyruvic acid (deamination) (-)
<i>Proteus vulgaris</i> ATCC 13315	Good Growth	Phenyl pyruvic acid (deamination) (+)
<i>Escherichia coli</i> ATCC 25922	Good Growth	Phenyl pyruvic acid (deamination) (-)

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.