Phenylalanine Agar

Intended Use
Phenylalanine Agar is used for differentiation of *Proteus* species and *Providencia* species from other *Enterobacteriaceae* on the basis of deamination of phenylalanine.

Summary
Phenylalanine Agar is a modification of the medium originally formulated by Ewing *et al., Proteus*, *Providencia* and *Morganella* species are capable to deaminate phenylalanine and form phenylpyruvic acid by enzymatic action.

Principle
Yeast extract provides the essential nutrients for the growth of the microorganisms. Sodium chloride maintains the osmotic balance. DL-Phenylalanine is the substrate for the deaminase enzyme which converts phenylalanine to phenylpyruvic acid. Addition of few drops of ferric chloride gives green colour, indicating a positive test result.

Formula*

Ingredients	**g/L**
Yeast Extract	3.0
Sodium Chloride	5.0
DL-Phenylalanine	2.0
Disodium Phosphate	1.0
Agar	15.0
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2ºC-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 26.00 g of the powder in 1000 mL purified / distilled water and mix thoroughly.
2. Boil with frequent agitation to dissolve the powder completely. DO NOT OVERHEAT.
3. Dispense in tubes and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Allow the medium to cool in slanting position.

Quality Control
Dehydrated Appearance: Light yellow coloured, homogenous, free flowing powder.
Prepared Appearance: Light amber coloured, clear to slightly opalescent gel forms in petridishes.
Cultural Response: Cultural characteristics observed after an incubation at 30-35°C for 18-20 hours.

Organism (ATCC)	**Growth**	**Phenylalanine deaminase**
Escherichia coli (8739)	Good	-
Escherichia coli (25922)	Good	-
Klebsiella aerogenes (13048)	Good	-
Proteus hauseri (13315)	Good	+
Proteus mirabilis (25933)	Good	+

Key:
+ = Green colouration after addition of 10% Ferric chloride
- = No colour change

Interpretation of Results

1. Following the incubation period, add few drops of the 10% aqueous ferric chloride reagent.
2. Appearance of green colour is an indication of positive test result.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

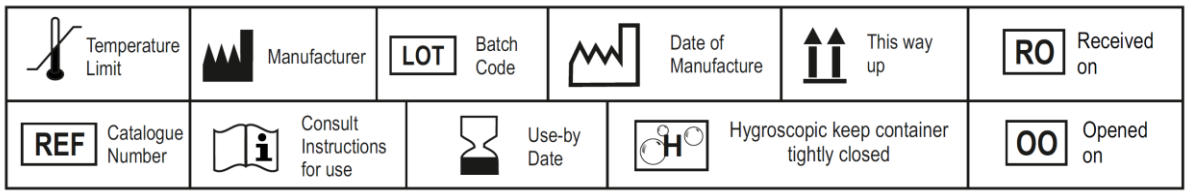
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Ewing *et al.,* 1957. Public Health Life. 15: 153.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201160070100	Dehydrated Culture Media	100 g
201160070500	Dehydrated Culture Media	500 g



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Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.