

Egg Yolk Emulsion

Intended Use

A sterile, stabilized emulsion of egg yolk recommended for use in culture media.

Summary

Egg yolk emulsion is particularly rich in lecithin, a substrate for the enzyme lecithinase. Production of lecithinase is a differentiating characteristic shared by a number of bacteria species including *Clostridium*, *Bacillus* and *Staphylococcus*.

Principle

Some bacteria produce lecithinases enzymes that split lipoprotein complexes in egg yolk and produce opalescence in media containing egg yolk. Wide zones of opalescence around colonies show lecithinase activity.

Reagents / Contents

Microxpress® Egg Yolk Emulsion is pre-diluted Supplement.

Each 100 mL vial contains:

Egg yolk	30 mL
Sterile Saline	70 mL

Storage and Stability

1. Store the Microxpress® Egg Yolk Emulsion Supplement kit at 2°C-8°C, away from light.
2. Stability of the Microxpress® Egg Yolk Emulsion Supplement kit is as per the expiry date mentioned on the label.

Directions

1. Bring the vial to room temperature and shake well to attain a uniform emulsion.
2. Aseptically add 50 mL emulsion to sterile, molten Baird Parker Agar Base (63 g/950 mL), Mannitol Salt Agar Base (111 g/950 mL) and *Bacillus Cereus* Agar Base (41 g/950 mL) or 100 mL emulsion to sterile, molten McClung Toabe Agar Base (75.1g/900 mL).
3. Mix well and dispense as desired.

Cultural Response

Egg yolk emulsion is added to various media used to identify *Clostridium*, *Bacillus* and *Staphylococcus* based on their lecithinase activity. Cultural characteristics were observed after an incubation of 24-48 hours at 30°C-35°C when added to the following media bases (for selective isolation of the respective organism):

1. Baird parker agar base along with 3.5% Potassium Tellurite solution.
2. *Bacillus cereus* agar base with Polymixin B selective supplement
3. McClung Toabe agar base

Quality Control

Cultural Response on Baird Parker Agar Base

Organism (ATCC)	Growth	Colour of Colony	Lecithinase Production
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	Good	Grey black shiny	+
<i>Bacillus spizizenii</i> (6633)	Partial inhibition	Dark Brown matt	-
<i>Escherichia coli</i> (25922)	Complete inhibition	-	-

Cultural Response on *Bacillus Cereus* Agar Base

Organism (ATCC)	Growth	Colour of Colony	Lecithinase Production
<i>Bacillus cereus</i> (11778)	Good	Blue	+
<i>Bacillus spizizenii</i> (6633)	Good	Straw coloured	-
<i>Escherichia coli</i> (25922)	Complete inhibition	-	-

Cultural Response on McClung Toabe Agar Base

Organism (ATCC)	Growth	Colour of Colony	Lecithinase Production
<i>Clostridium perfringens</i> (13124)	Good	White	+

Key

(+): Lecithinase production indicated by clear halo around the colony.

(+*): Lecithinase production indicated by opaque zone around the colony.

Remarks

1. Do not use cracked or defected vials.
2. Good laboratory practices and hazard precautions must be observed at all times.

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.

References

1. Practical Medical Microbiology, Mackie & McCartney, 13th Edition 1989, Edited by J.G. Collee, J.P. Daguid.
2. Data on file: Microxpress®, A division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
204050370100	Media Selective Supplement	5 x 100 mL

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.
