

Eosin Methylene Blue (EMB) Agar

Principle:

A differential plating medium for the detection & isolation of the gram-negative enteric bacteria.

Purpose:

- To aid in the differentiation of lactose fermenting bacteria from non-lactose fermenting bacteria.
- To aid in the differentiation of *Enterobacter aerogenes* and *Escherichia coli*.

Test Procedure:

1. Inoculate the organism directly onto the surface of an EMB agar plate and streak for isolation.
2. Incubate inoculated plate aerobically at 37°C.
3. Examine for growth after 18-24 hours of incubation.

Interpretations:

- Coliforms that utilize the lactose and/or sucrose are blue/black with a greenish metallic sheen. Indicative of *Escherichia coli*.
- Coliforms such as *Klebsiella pneumoniae* have mucoid colonies that may be purple and/or exhibit a green metallic sheen.
- Good to excellent, colorless colonies indicative of *Proteus vulgaris*, *Salmonella choleraesuis*, and *Shigella* spp.

