Coagulase Plasma (Rabbit Plasma Fibrinogen) RDM-K-RPF-01

Principle

The enzyme coagulase is produced by several microorganisms. Coagulase is present in two forms: bound coagulase, which is attached to the cell wall of the organism, and free coagulase, which is an extracellular enzyme. The coagulase acts on a constituent of rabbit plasma (coagulase reacting factor) to produce a thrombin-like substance. This substance activates fibrinogen to form fibrin, which results in the formation of a fibrin clot. EDTA is used as an anti-coagulant.

Use: Use for identification and confirmation of coagulase positive *Staphylococci* or coagulation activity of microorganism.

Contents*

Coagulase plasma with EDTA	0.100 g
Sterile Distilled Water	3.000 ml

* Formula adjusted for optimum performance and parameters

Test Procedures:

1. Add 0.5 ml of coagulase plasma to a clean test tube.
2. Add 0.5 ml from a pure overnight incubated broth of test culture or a loopful of a pure culture from a nonselective medium.
3. Mix thoroughly to mix the coagulase plasma and test culture.
4. Incubate the tube at 35–37 °C in an incubator or water bath and observe every 30 minutes for up to 4 hours.
5. Observe for clot formation by gently slanting the tube. If the clot formation observed is considered coagulase-positive.

Specimens' types analyzed

Food, and clinical samples

Precautions to be taken

1. Clinical samples and microbial cultures should be considered as pathogenic biohazard and handled accordingly. Good laboratory practices and hazard precautions must be observed at all times.
2. Do not use damaged or leaking kits. Avoid contact of reagents with skin and eyes.

Quality Control

Physical Parameters:

Physical state - Liquid.
Color of liquid: Transparent
Clarity of liquid: Clear

Different Microbial Response

Organism	ATCC	Coagulase test
Staphylococcus aureus	25923	Positive
Escherichia coli	8739	Negative

Storage and Shelf Life: Keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

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4. MacFaddin, J.F. 2000. Biochemical Tests for Identification of Medical Bacteria. 3rd ed. Lippincott Williams & Wilkins, Philadelphia, PA.
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6. Forbes, B.A., D.F. Sahm, and A.S. Weissfeld. 2007. Bailey and Scott's Diagnostic Microbiology. 12th ed. Mosby Elsevier, St. Louis, MO.

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