

# Salmonella Confirm Latex Kit

# 355-6711

## DEFINITION

Salmonella Confirm Latex kit is a rapid agglutination test for the confirmation of *Salmonella* spp. from colonies isolated on selective agar medium.

It is the confirmation test of NF VALIDATION certified RAPID *Salmonella* methods (codes **356-3961**, **356-3962** and **356-4705**).

## PRINCIPLE

Latex particles are coated with polyvalent rabbit antisera raised against a wide range of *Salmonella* antigens.

When mixed with a suspension of *Salmonella* organisms, the latex particles rapidly agglutinate to form visible clumps.

Salmonella Confirm Latex kit allow the detection of motile and non-motile *Salmonella*.

## PRESENTATION

### Salmonella Confirm Latex kit

1 pack of 50 tests,

code **355-6711**

- **1 bottle of latex reagent** 2.5 mL.

Preserved with 0.099% sodium azide. (Blue cap)

- **1 bottle of positive control** 0.5 ml.

Preserved with 0.099% sodium azide. (Black cap)

- **1 bottle of 0.85% isotonic solution** 5 ml.

Preserved with 0.099% sodium azide. (white cap)

- Disposable agglutination slides and disposable mixing sticks

## STORAGE AND SHELF LIFE

- Reagents : + 2 - 8°C.
- Once opened, all reagents are stable until the expiry dates indicated on the label in absence of microbial contamination.
- Should not be frozen

## OTHER REQUIRED PRODUCT(S) (NOT SUPPLIED)

(Non exhaustive list)

- Loop for collection of bacterial colonies
- Timer
- Disinfectant tank or autoclave bag for disposal of used slides and sticks
- All usual laboratory equipment

## PROTOCOLE

Salmonella Confirm Latex kit can be used to screen presumptive salmonella colonies isolated on selective or non-selective agar plates.

NB: in case only one colony is characteristic on selective agar plate, a subculture on a non-selective agar is required.

## Agglutination reaction

- Bring the latex reagent to room temperature.
- Thoroughly homogenize the latex reagent by gently inverting.

### Reagent control:

- Dispense one drop of latex reagent and one drop of isotonic solution into a circle of a disposable agglutination slide.
- Mix the latex reagent and the isotonic solution with a clean mixing stick, rock the slide gently for 2 minutes, and observe.
- If any agglutination is seen, either the latex or isotonic solution is contaminated and should be discarded.

### Positive control:

- Dispense one drop of positive control and one drop of latex reagent into a circle of a disposable agglutination slide.
- Mix the latex reagent and the isotonic solution with a clean mixing stick, rock the slide gently for 2 minutes, and observe.
- Within 2 minutes, agglutination indicating a positive result. If no agglutination is seen, a fresh kit should be used.

### Colony testing:

- Dispense one drop of isotonic solution into a circle of a disposable agglutination slide.
- Using an inoculating loop, remove a colony from the agar plate.
- Mix the colony and the isotonic solution with a clean mixing stick, rock the slide gently for 2 minutes, and observe for autoagglutination or clumping (suspension must remain smooth).
- If any agglutination is seen, either the latex or isotonic solution is contaminated and should be discarded.
- Add one drop of latex reagent to the bacterial suspension. **Do not allow the dropper to touch the suspension.**

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- Mix the latex reagent and the bacterial suspension with a clean mixing stick, and rock the slide. Examine for agglutination within a maximum of 2 minutes.

## Interpretation of results

### Positive reaction

The latex particles rapidly agglutinate to form visible clumps, and indicate the presence of *Salmonella* in the sample.

### Negative reaction

The suspension remains smooth.

## LIMITES OF USE

- Rough strains of *Salmonella* are known to cause non-specific autoagglutination in saline alone and therefore cannot be tested with Salmonella Confirm Latex kit.
- Some non-motile strains may not be detected by Salmonella Confirm Latex kit.
- Although the most prevalent *Salmonella* strains can be detected by Salmonella Confirm Latex kit, it must be noted that during the NF VALIDATION extension of RAPID *Salmonella* method, Salmonella Confirm Latex kit not allowed the detection of 41 of the 150 tested strains.
- Only fresh cultures from agar plate should be used with the Salmonella Confirm Latex kit.

## PRECAUTIONS

- Respect the Good Laboratory Practice (Eg. EN ISO 7218)
- Use the mixing stick and slides supplied in the kit.
- Mixing stick and slides are for single use.
- Discard all disposable material used in an autoclavable waste bin or disinfectant bath.
- Sodium azide, which is used as a preservative in the kit reagents can react with lead or copper plumbing to form potentially explosive metal azides. Dispose by flushing with a large volume of water to prevent azide build-up.

## QUALITY CONTROL OF MANUFACTURER

Every product manufactured and marketed by Bio-Rad is subject to a procedure of quality assurance at all stages, from reception of raw materials through to commercialization of the end-product. Each batch of finished products undergoes quality control and is commercialized only if it satisfies the criteria of acceptability.