

Salmonella Latex Kit Confirmation of *Salmonella* spp.

355-6710

DEFINITION

SALMONELLA LATEX KIT is a rapid agglutination test for the confirmation of *Salmonella* spp. from colonies isolated on selective or non selective agar medium.

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

PRINCIPLE

SALMONELLA LATEX test is based on agglutination of *Salmonella* spp. by specific antiserum.

SALMONELLA LATEX is a mixture of crude sera obtained by immunization of rabbits against salmonella reference strains.

SALMONELLA LATEX is a polyvalent reagent for the detection of salmonella of groups B to E and G.

PRESENTATION

SALMONELLA LATEX KIT, 75-test kit, code **355-6710**

- **Latex test:** dropper bottle of 2 ml of latex reagent.
- **Positive control:** dropper bottle of 1 ml of positive control reagent.
- 14 disposable agglutination cards.
- 100 rods.
- 1 notice.

STORAGE

Once opened, all reagents are stable until the expiry dates indicated on the label, if stored at +2-8°C and in absence of microbial contamination.

Store the latex reagent bottles upright.

THE LATEX REAGENTS 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 cards

PROTOCOLE

SALMONELLA 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 shaking. Vortex reagent if necessary. For complete mixing, make sure that the dropper pipette is empty.
- Deposit a drop of latex test reagent onto one of the circles of the agglutination card.
- Take one isolated colony with a loop or a plastic rod and emulsify it in the drop of latex for 10 seconds.
- Homogenize by gently rotating the card. Results must be read **within 30 to 60 seconds** of beginning the card rotation.
- Evaluate results according to the following criteria and then discard the card into a disinfectant container. Do not re-use the card.

Interpretation of results

Positive reaction

A positive reaction is evidenced by the formation of aggregates within 30 to 60 seconds of beginning the card rotation, visible to the naked eye and under normal lighting. A slow and weak agglutination could signify a non-specific agglutination.

Negative reaction

The reaction is negative if the suspension does not produce any aggregates and retains its milky appearance.

PRECAUTIONS

The **SALMONELLA LATEX KIT** is intended for culture confirmation testing only.

The quality of results depends on complying strictly with Good Laboratory Practice.

- The temperature of the reagents must be between 18 and 30°C when used.
- Do not touch the reaction surface of the agglutination cards.

Salmonella Latex Kit

- Shake the bottles of latex before use.
- Wipe the tip of the reagent dropper bottle in order to obtain well calibrated drops.
- Hold the reagent bottle vertical to deposit drops.
- Use the plastic rods supplied in the kit or a loop for mixing the latex reagent and the bacterial colonies. **Do not use wooden sticks.**
- Rods are for single use.
- Discard all disposable material used in an autoclavable waste bin or disinfectant bath.
- The colony to confirm should not be too small (>1mm). In case of isolated colony <1mm, an isolation step on a non selective medium (for example, Nutrient 2.1% agar, code **356-4485**) is recommended.
- The absence of auto-agglutination of the bacterial colony can be tested in 0.85% physiological sterile water (code **355-4164**). If auto-agglutination is detected, the use of a latex test for colony confirmation is impossible.

Hygiene and safety instructions

- Always observe the current techniques and precautions concerning protection against microbiological hazards.
- All the latex reagents contain Sodium Azide. Avoid any contact with the eyes, skin and mucous membranes.
- Sodium Azide may react with lead or copper plumbing to form metal Azides that are highly explosive. Flush plumbing with a large volume of water if reagents are thrown into the sink.

LIMITATION OF USE

Salmonella diarizonae and *Salmonella arizonae* subspecies give negative results with Salmonella latex reagent.

QUALITY CONTROL OF TEST

Evaluate the latex reagent at each use by verifying the absence of any aggregates when depositing the reagent on the card. The latex should be periodically tested with the positive control. Basically, add one drop of positive control to one drop of latex test reagent and mix thoroughly. Rock the card to see the agglutination reaction within 30 seconds.

The latex reagent can also be tested with previously identified strains of Salmonella groups B to E and G.

QUALITY CONTROL OF MANUFACTURER

STRAINS	Agglutination after 30 sec
<i>Salmonella</i> Enteritidis ATCC 13076	+
<i>Salmonella</i> Typhimurium ATCC 14028	+
<i>Escherichia coli</i> ATCC 25922	-
<i>Enterococcus faecalis</i> ATCC 19433	-

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