

OMNI-O (A60) OMNIVALENT ANTISERUM

356-0781

DEFINITION

Agglutinating *Salmonella* Omni-O antiserum (A-60) allows presumptive identification of O-agglutinable strains of *Salmonellae* belonging to groups A to 60 from colonies isolated on agar medium.

PRINCIPLE

The test is based on agglutination by omnivalent *Salmonella* antiserum of bacteria possessing the corresponding antigens.

Salmonella Omni-O antiserum is composed of a mixture of crude sera obtained by immunization of rabbits with reference strains.

It contains agglutinins directed against O antigenic factors of *Salmonellae* belonging to groups A to 60.

PRESENTATION

Omnivalent *Salmonella* Omni-O antiserum (A-60)
3 ml dropper bottle **code 356 0781**

STORAGE

- Sera stored at +2°C-8°C and free of contamination are stable until the expiry date indicated on the kit (even after opening).
- If validity is in doubt carry out a check with a positive strain (cf. § PERFORMANCE / QUALITY CONTROL TEST).

MATERIAL REQUIRED BUT NOT SUPPLIED

- Glass slide
- Plastic or platinum inoculation loop
- Normal saline solution

PRECAUTIONS FOR USE

- Respect of Good Laboratory Practice

• Always comply with current techniques and precautions concerning protection against microbiological hazards, for handling and elimination of material and biological products used for the agglutination reaction.

• This serum contains < 0.1% sodium azide. Sodium azide can react with lead or copper present in the plumbing forming explosive metallic azides. When eliminating these reagents, rinse abundantly with water to avoid the formation of azide deposits

- Do not dilute reagents.

PROCEDURE

Identification of *Salmonella* is performed on a pure, fresh culture of *Salmonella* isolated on agar medium.

- Deposit 1 drop of normal saline solution and 1 drop of antiserum next to each other on the slide.
- Take one loop of culture.
- Suspend these bacteria in the drop of normal saline solution, ensuring homogeneous suspension by gradually adding bacteria to the serum.
- Take a second loop of culture and suspend it in the drop of antiserum, taking the same precautions.
- Rotate the slide gently.

• Examine the mixture with the naked eye over a dark surface or over a concave mirror.

INTERPRETATION OF RESULTS

No agglutination should be observed with the normal saline solution. If agglutination is observed, it corresponds to a self-agglutinating strain and reaction with the antiserum therefore cannot be interpreted.

A positive reaction corresponds to the appearance of agglutination with the antiserum in less than **30 seconds**. When the reaction is delayed or when the suspension retains a homogeneous, milky appearance, the result is negative.

Agglutination of a strain of *Salmonella* with Omni-O antiserum indicates that the strain is O-agglutinable and can be serotyped with the aid of specific sera (polyvalent then monovalent).

PERFORMANCE /QUALITY CONTROL TEST

The activity of omnivalent *Salmonella* Omni-O antiserum (A-60) is controlled with the following positive strains:

- *Salmonella typhimurium* O:4,5 (group B)
- *Salmonella Infantis* O: 6,7 (group C1)
- *Salmonella enteritidis* O: 9 (group D1)
- *Salmonella London* O:3, 10 (group E1)

MANUFACTURER'S QUALITY CONTROL

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 commercialisation of the end-product. Each batch of finished products undergoes quality control and is commercialised only if it satisfies the criteria of acceptability.

Records relative to the production and control of each batch are kept on file by the manufacturer.

LIMITATIONS OF USE

- *Salmonella* Omni-O antiserum (A-60) is specific for O-agglutinable *Salmonellae* belonging to groups A to 60.

However, cross-reactions are possible with the *Escherichia*, *Shigella*, *Citrobacter* and *Proteus* genres due to the partial antigenic identity of these bacteria.

- This serum is intended for orienting presumptive diagnosis of identification after RAPID' *Salmonella* agar. When a positive result is obtained, species identification can be confirmed before carrying out serotyping with specific sera.