SALMONELLA SERO-QUICK ID KIT

- Identification of S. Enteritidis
- Identification of S. Typhimurium
- 8 antisera
- Quick results

Salmonella Enteritidis

Salmonella Typhimurium
**Description**

The Salmonella Sero-Quick ID Kit consists of eight antisera, and is the minimum of antisera needed for identification of *S. Enteritidis* (1,9,12:g,m:-) and *S. Typhimurium* (1,4,5,12:i,1,2).

The antisera are delivered in dropper bottles containing ready to use dilutions and can be renewed separately. Around 100 tests can be performed with the Sero-Quick ID Kit.

The diagnostic Salmonella O and H antisera are polyclonal antisera made specific by absorption.

**Background**

*Salmonella Enteritidis* and *Salmonella Typhimurium* are the most common serotypes in the world and constitute 82% of all Salmonella strains isolated from humans.

It is therefore highly important to be able to serotype these strains quickly.

**Application**

The eight antisera are used as indicated below. At first the O antisera are tested and thereafter the H antisera and phase inversion antisera are used.

The serotyping may be expanded to identify additional serotypes, and Statens Serum Institut offers assistance in composing a panel covering the specific needs of our customers.

**Reaction chart**

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Enteritidis</th>
<th>Typhimurium</th>
<th>Culture medium</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>O antisera</strong></td>
<td>Enteritidis</td>
<td>Typhimurium</td>
<td>Culture medium</td>
</tr>
<tr>
<td>O:4</td>
<td>+</td>
<td>+</td>
<td>Beef</td>
</tr>
<tr>
<td>O:9</td>
<td>+</td>
<td>+</td>
<td>extract agar</td>
</tr>
<tr>
<td><strong>H antisera</strong></td>
<td>Enteritidis</td>
<td>Typhimurium</td>
<td>Culture medium</td>
</tr>
<tr>
<td>H:i</td>
<td>n.p.</td>
<td>+</td>
<td>Beef</td>
</tr>
<tr>
<td>H:m</td>
<td>+</td>
<td>n.p.</td>
<td>extract agar</td>
</tr>
<tr>
<td>H:2</td>
<td>n.p.</td>
<td>+</td>
<td>or</td>
</tr>
<tr>
<td>H:q,s,t,p,u</td>
<td>n.p.</td>
<td>+</td>
<td>Swarm agar</td>
</tr>
<tr>
<td><strong>Phase inversion antisera</strong></td>
<td>Enteritidis</td>
<td>Typhimurium</td>
<td>Culture medium</td>
</tr>
<tr>
<td>SG2</td>
<td>n.p.</td>
<td>+</td>
<td>Swarm agar</td>
</tr>
<tr>
<td>SG6</td>
<td>n.p.</td>
<td>+</td>
<td>Swarm agar</td>
</tr>
</tbody>
</table>

n.p. = not performed

a: SG2 is used for phase inversion of strains initially expressing H:i

b: SG6 is used for phase inversion of strains initially expressing H:1,2

**Flow chart**

1. **H phase**
   - H:i
   - H:2
   - H:m

2. **Phase inversion**
   - SG2
   - SG6

3. **H reconstruction**
   - H:i
   - H:2

4. **O type**
   - O:4
   - O:9

**Storage and shelf life**

Store at 2-8°C in a dark place. Expiry date is printed on the package.

**Available product**

Article No. 62984
Salmonella Sero-Quick ID Kit, 1 box

**References**


2. Salmonella surveillance: a global survey of public health serotyping.

**Information and ordering**

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**Antisera**

**H:i,q,s,t,p,u**

This antiserum is used for exclusion of other serotypes belonging to serogroup O:9 (D1) that expresses H:g or H:m,t as first H phase.

**Phase inversion antisera**

Many *Salmonella* serotypes are diphasic, having two flagella antigens. However a *Salmonella* bacterium expresses only one flagella antigen at a time, ex. *Salmonella Typhimurium* (1,4,5,12:i,1,2) either expresses the first phase antigen H:i or the second phase antigen H:1,2.

In case the strain in question expresses the antigen H:i the second phase antigen (H:1,2) may be forced to appear by growing the culture in a soft agar plate containing phase inversion antiserum against the H:i (phase inversion antiserum SG2F). *S. Enteritidis* is monophasic and therefore phase inversion is not needed.