Hi aureus™ Coagulase Confirmation Kit

**Intended use**
Hi aureus™ Coagulase Confirmation Kit is recommended for the rapid detection of coagulase positive *Staphylococcus aureus*.

**Kit Contents:**
Hi aureus™ Coagulase Confirmation Kit
1. Tubes containing dehydrated medium - 25 nos.
2. Suspension fluid (20 ml) 1 bottle.
3. Dropper for dispensing suspension fluid 1 no.
4. Insert

**Directions:**
Screening of *Staphylococcus aureus*
1. Rehydrate the medium with 0.6 ml of suspension fluid.
2. Inoculate the nasal swab into the rehydrated medium. Mix well, remove and discard the swab.
3. Incubate the inoculated tube at room temperature (or in an incubator at 30-35°C).
4. Clot formation indicates the presence of *Staphylococcus aureus*.

The results can be summarized as follows.

<table>
<thead>
<tr>
<th>Organisms (ATCC)</th>
<th>Clot Formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRSA (Methicillin Resistant <em>Staphylococcus aureus</em>)</td>
<td>+</td>
</tr>
<tr>
<td>MSSA M SSA (Methicillin Sensitive <em>Staphylococcus aureus</em>)</td>
<td>+</td>
</tr>
<tr>
<td><em>Escherichia coli</em></td>
<td>-</td>
</tr>
</tbody>
</table>

**Principle and Interpretation:**

*Staphylococcus aureus* is a cause of skin infections and nosocomial infections. Coagulase test is a confirmatory test recommended for the detection of *Staphylococcus aureus* from other *Staphylococcus* species. The development of resistance towards the commonly used methicillin for the treatment resulted in Methicillin Resistant *Staphylococcus aureus* (MRSA). This bacterium has caused major health hazards and is at greater risk of treatment failure, increased mortality rate and higher costs (1). Besides skin infections, it can cause life-threatening infections such as endocarditis, pneumoniae and bacteremia. This test can be used in screening of *Staphylococcus aureus* (MSSA and MRSA strains).

Rapid detection of MRSA is therefore a need of the time. The detection of MRSA through the traditional methods of antimicrobial sensitivity takes considerably long time. However in recent use, chromogenic media are available which takes around 24-48 hours of incubation for its detection.

The Hi aureus™ Coagulase Confirmation Kit is recommended for rapid detection of MRSA and MSSA. The testing is based on the ability of *Staphylococcus* to form clot using coagulase enzyme. The ability of *Staphylococcus* to produce coagulase was first reported by Loeb in 1903. Only *Staphylococcus aureus* produce coagulase enzyme, which is able to clot rabbit plasma, differentiating them from rest of the *Micrococcaceae*.

**Type of specimen**

<table>
<thead>
<tr>
<th></th>
<th>Blood</th>
<th>Skin</th>
</tr>
</thead>
</table>

**Specimen Collection and Handling**

<table>
<thead>
<tr>
<th></th>
<th>Blood</th>
<th>Skin</th>
</tr>
</thead>
</table>

**Warning and Precautions:**
In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

*Please see disclaimer overleaf*
**Cultural Response:** Cultural response is observed after an incubation of 2-14 hours at room temperature.

**Organisms (ATCC)**
- MRSA (Methicillin Resistant *Staphylococcus aureus*) (43300) +
- MSSA (Methicillin Sensitive Staphylococcus aureus) (25923) +
- *Escherichia coli* (25922)

**Limitations:**
1. Certain species of *Staphylococcus aureus* may show negative coagulase reaction.
2. Coagulase positive test is also exhibited by *Yersinia pestis*.

**Performance and Evaluation**
Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

**Quality Control:**

**Appearance of powder**
Off-white to cream coloured, homogeneous, free flowing powder in tube.

**Cultural Response:** Cultural response is observed after an incubation of 2-14 hours at room temperature.

**Organisms (ATCC) Clot Formation**
- MRSA (Methicillin Resistant *Staphylococcus aureus*) (43300) +
- MSSA (Methicillin Sensitive Staphylococcus aureus) (25923) +
- *Escherichia coli* (25922) -

**Storage and Shelf Life**
Store between 2 °C. Use before expiry date on the label. is n s n Product performance is best if used within stated expiry period.

**Disposal**


**References:**

Disposal

In vitro diagnostic medical device

CE Marking

Storage temperature

2°C - 8°C

Do not use if package is damaged

HiMedia Laboratories Pvt. Limited,
B /4-6 , MIDC, Dindori, Nashik MH

www.himedialabs.com

CE Partner 4U ,Esdoornlaan 13, 3951
DB Maarn The Netherlands,
www.cepartner4u.eu

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.