### Overview

**Product name**  
Anti-Staphylococcus aureus antibody [704]  

**Description**  
Mouse monoclonal [704] to Staphylococcus aureus  

**Host species**  
Mouse  

**Specificity**  
Reacts with Staphylococcus aureus, Protein A-negative Staphylococcus aureus and Staphylococcus epidermidis. Does not cross-react with Corynebacteria species, Streptococcus species or Mycoplasma species.  

**Tested applications**  
Suitable for: ELISA, ICC/IF, IHC-P, Flow Cyt  

**Species reactivity**  
Reacts with Staphylococcus aureus, Protein A-negative Staphylococcus aureus and Staphylococcus epidermidis. Does not cross-react with Corynebacteria species, Streptococcus species or Mycoplasma species.  

**Immunogen**  
Other Immunogen Type. UV-inactivated Staphylococcus aureus cells  

**General notes**  
Abcam is committed to meeting high quality standards of ethical manufacturing and has decided to discontinue this product by June 2020 as it has been generated by the ascites method. We are sorry for any inconvenience this may cause. We suggest ab20920 as a possible replacement.

### Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C. Avoid freeze / thaw cycle. Do Not Freeze.</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>pH: 7.40</td>
</tr>
<tr>
<td></td>
<td>Preservative: 0.1% Sodium azide</td>
</tr>
<tr>
<td></td>
<td>Constituent: PBS</td>
</tr>
<tr>
<td>Purity</td>
<td>Ascites</td>
</tr>
<tr>
<td>Purification notes</td>
<td>Purified from ascites.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Clone number</td>
<td>704</td>
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<tr>
<td>Isotype</td>
<td>IgG3</td>
</tr>
<tr>
<td>Light chain type</td>
<td>kappa</td>
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</tbody>
</table>
Relevance

S. aureus binds IgG molecules by their Fc region. In serum, the bacteria will bind IgG molecules in the wrong orientation on their surface, which hinders opsonization and phagocytosis. Mutants of S. aureus lacking protein A are more efficiently phagocytosed in vitro, and mutants in infection models have diminished virulence. Due to its affinity for the Fc region of many mammalian immunoglobulins, protein A is considered a universal reagent in biochemistry and immunology.

Cellular localization

Secreted; cell wall.

Applications

Our Abpromise guarantee covers the use of ab37644 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>ELISA</td>
<td></td>
<td>Use at an assay dependent concentration. May be used to detect and quantify Staphylococcus aureus cells.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 21208278</td>
</tr>
<tr>
<td>Flow Cyt</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 20016671 ab18392 - Mouse monoclonal IgG3, is suitable for use as an isotype control with this antibody.</td>
</tr>
</tbody>
</table>

Target

Relevance

S. aureus binds IgG molecules by their Fc region. In serum, the bacteria will bind IgG molecules in the wrong orientation on their surface, which hinders opsonization and phagocytosis. Mutants of S. aureus lacking protein A are more efficiently phagocytosed in vitro, and mutants in infection models have diminished virulence. Due to its affinity for the Fc region of many mammalian immunoglobulins, protein A is considered a universal reagent in biochemistry and immunology.

Cellular localization

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Images

ICC/IF analysis of Staphylococcus aureus using ab37644 at 1/200 dilution. The image is that of HMC-1 mast cells (DAPI stained nuclei) with S. aureus (green). Cells were cultured for 2 hours with the additon of S. aureus, and staining undertaken as detailed above.

Immunocytochemistry/ Immunofluorescence - Anti-Staphylococcus aureus antibody [704] (ab37644)
ab37644 staining Staphylococcus aureus in 16HBE cells by Immunocytochemistry/Immunofluorescence. Cells were fixed with 4% paraformaldehyde, blocked with 5% normal donkey serum, and stained with ab37644. The secondary used was an anti-mouse IgG Alexa Fluor 488 (green). Phalloidin (blue).

Scale bar 20 µm.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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