**Product datasheet**

**Anti-Respiratory Syncytial Virus Fusion (F) Glycoprotein antibody [RSV5A6] ab94968**

**2 References**

**Overview**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-Respiratory Syncytial Virus Fusion (F) Glycoprotein antibody [RSV5A6]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Mouse monoclonal [RSV5A6] to Respiratory Syncytial Virus Fusion (F) Glycoprotein</td>
</tr>
<tr>
<td>Host species</td>
<td>Mouse</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: ELISA, WB, ICC/IF, IHC-P, IHC-Fr</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Other species</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Human Respiratory Syncytial Virus strain A2 infected HeLa cells</td>
</tr>
<tr>
<td>General notes</td>
<td>Fusion partner: PS-NS/1-Ag4</td>
</tr>
</tbody>
</table>

ab94968 is useful for the identification and location of expression of the fusion glycoprotein of Human Respiratory Syncytial Virus of both sub-groups A and B.

**Properties**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.</td>
</tr>
</tbody>
</table>
| Storage buffer     | Preservative: None  
Constituents: PBS |
| Purity           | Protein A purified |
| Primary antibody notes | ab94968 is useful for the identification and location of expression of the fusion glycoprotein of Human Respiratory Syncytial Virus of both sub-groups A and B. |
| Clonality        | Monoclonal |
| Clone number     | RSV5A6    |
| Isotype          | IgG2a     |

**Applications**

Our Abpromise guarantee covers the use of ab94968 in the following tested applications.
Respiratory Syncytial Virus (RSV) Fusion (F) Glycoprotein is a Class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the heptad repeat (HR) regions assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes. Directs fusion of viral and cellular membranes leading to delivery of the nucleocapsid into the cytoplasm. This fusion is pH independent and occurs directly at the outer cell membrane. The trimer of F1-F2 (protein F) interacts with glycoprotein G at the virion surface. Upon binding of G to heparan sulfate, the hydrophobic fusion peptide is unmasked and interacts with the cellular membrane, inducing the fusion between host cell and virion membranes.

Notably, RSV fusion protein is able to interact directly with heparan sulfate and therefore actively participates in virus attachment. Furthermore, the F2 subunit was identified as the major determinant of RSV host cell specificity. Later in infection, proteins F expressed at the plasma membrane of infected cells mediate fusion with adjacent cells to form syncytia, a cytopathic effect that could lead to tissue necrosis. The fusion protein is also able to trigger p53-dependent apoptosis.

**Cellular localization**

---

**Application**  | **Abreviews**  | **Notes**
---|---|---
ELISA  | Use at an assay dependent concentration.  |  
WB  | Use at an assay dependent concentration. Predicted molecular weight: 63 kDa.  |  
ICC/IF  | Use at an assay dependent concentration.  |  
IHC-P  | Use at an assay dependent concentration.  |  
IHC-Fr  | Use at an assay dependent concentration. Fix with Acetone.  |  

---

**Target**

**Relevance**
Respiratory Syncytial Virus (RSV) Fusion (F) Glycoprotein is a Class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the heptad repeat (HR) regions assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes. Directs fusion of viral and cellular membranes leading to delivery of the nucleocapsid into the cytoplasm. This fusion is pH independent and occurs directly at the outer cell membrane. The trimer of F1-F2 (protein F) interacts with glycoprotein G at the virion surface. Upon binding of G to heparan sulfate, the hydrophobic fusion peptide is unmasked and interacts with the cellular membrane, inducing the fusion between host cell and virion membranes. Notably, RSV fusion protein is able to interact directly with heparan sulfate and therefore actively participates in virus attachment. Furthermore, the F2 subunit was identified as the major determinant of RSV host cell specificity. Later in infection, proteins F expressed at the plasma membrane of infected cells mediate fusion with adjacent cells to form syncytia, a cytopathic effect that could lead to tissue necrosis. The fusion protein is also able to trigger p53-dependent apoptosis.

**Cellular localization**

---

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

---

**Our Abpromise to you: Quality guaranteed and expert technical support**

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,
please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors