

**Goat anti-Spike protein- S1 Domain (aa672-682) Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF4552a

### Specification

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#### Goat anti-Spike protein- S1 Domain (aa672-682) Antibody - Product Information

Primary Accession	<a href="#">P0DTC2</a>
Other Accession	<a href="#">NC_045512.2/MN908947</a>
Reactivity	<b>Human</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>141178</b>

#### Goat anti-Spike protein- S1 Domain (aa672-682) Antibody - Additional Information

**Gene ID** 43740568

#### Other Names

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) isolate Wuhan-Hu-1

#### Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Goat anti-Spike protein- S1 Domain (aa672-682) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Goat anti-Spike protein- S1 Domain (aa672-682) Antibody - Protein Information

**Name** S {ECO:0000255|HAMAP-Rule:MF\_04099}

#### Function

[Spike protein S1]: Attaches the virion to the cell membrane by interacting with host receptor, initiating the infection. The major receptor is host ACE2 (PubMed:<a href="http://www.uniprot.org/citations/32142651" target="\_blank">32142651</a>, PubMed:<a href="http://www.uniprot.org/citations/32155444" target="\_blank">32155444</a>, PubMed:<a href="http://www.uniprot.org/citations/33607086" target="\_blank">33607086</a>). When S2/S2' has been cleaved, binding to the receptor triggers direct fusion at the cell membrane (PubMed:<a href="http://www.uniprot.org/citations/34561887" target="\_blank">34561887</a>). When S2/S2' has not been cleaved, binding to the receptor results in internalization of the virus by endocytosis leading to fusion of the virion membrane with the host endosomal membrane (PubMed:<a href="http://www.uniprot.org/citations/32075877" target="\_blank">32075877</a>, PubMed:<a href="http://www.uniprot.org/citations/32075877" target="\_blank">32075877</a>, PubMed:<a href="http://www.uniprot.org/citations/32075877" target="\_blank">32075877</a>).

[32221306](http://www.uniprot.org/citations/32221306)). Alternatively, may use NRP1/NRP2 (PubMed:[33082294](http://www.uniprot.org/citations/33082294)), PubMed:[33082293](http://www.uniprot.org/citations/33082293)) and integrin as entry receptors (PubMed:[35150743](http://www.uniprot.org/citations/35150743)). The use of NRP1/NRP2 receptors may explain the tropism of the virus in human olfactory epithelial cells, which express these molecules at high levels but ACE2 at low levels (PubMed:[33082293](http://www.uniprot.org/citations/33082293)). The stalk domain of S contains three hinges, giving the head unexpected orientational freedom (PubMed:[32817270](http://www.uniprot.org/citations/32817270)).

### Cellular Location

Virion membrane {ECO:0000255|HAMAP-Rule:MF\_04099, ECO:0000269|PubMed:32979942}; Single-pass type I membrane protein {ECO:0000255|HAMAP-Rule:MF\_04099, ECO:0000269|PubMed:34504087}. Host endoplasmic reticulum-Golgi intermediate compartment membrane {ECO:0000255|HAMAP-Rule:MF\_04099, ECO:0000269|PubMed:34504087}; Single-pass type I membrane protein {ECO:0000255|HAMAP-Rule:MF\_04099}. Host cell membrane {ECO:0000255|HAMAP-Rule:MF\_04099, ECO:0000269|PubMed:34504087}; Single-pass type I membrane protein {ECO:0000255|HAMAP-Rule:MF\_04099}. Note=Accumulates in the endoplasmic reticulum-Golgi intermediate compartment, where it participates in virus particle assembly. Some S oligomers are transported to the host plasma membrane, where they may mediate cell-cell fusion (PubMed:34504087). An average of 26 +/-15 S trimers are found randomly distributed at the surface of the virion (PubMed:32979942) {ECO:0000255|HAMAP-Rule:MF\_04099, ECO:0000269|PubMed:32979942, ECO:0000269|PubMed:34504087}

### Goat anti-Spike protein- S1 Domain (aa672-682) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat anti-Spike protein- S1 Domain (aa672-682) Antibody - Images