

Anti-COVID-19 Spike glycoprotein Antibody
Rabbit polyclonal antibody to COVID-19 Spike glycoprotein
Catalog # AP61626

Specification

Anti-COVID-19 Spike glycoprotein Antibody - Product Information

Application	WB, E
Primary Accession	PODTC2
Host	Rabbit
Clonality	Polyclonal
Calculated MW	141178

Anti-COVID-19 Spike glycoprotein Antibody - Additional Information

Other Names

Spike glycoprotein; S glycoprotein; E2; Peplomer protein

Target/Specificity

Recognizes COVID-19 Spike glycoprotein.

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-COVID-19 Spike glycoprotein 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: [32142651](http://www.uniprot.org/citations/32142651), PubMed: [32155444](http://www.uniprot.org/citations/32155444), PubMed: [33607086](http://www.uniprot.org/citations/33607086)). When S2/S2' has been cleaved, binding to the receptor triggers direct fusion at the cell membrane (PubMed: [34561887](http://www.uniprot.org/citations/34561887)). 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: [32075877](http://www.uniprot.org/citations/32075877), PubMed: [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). The stalk domain of S contains three hinges, giving the head unexpected orientational freedom (PubMed: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}

Anti-COVID-19 Spike glycoprotein 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](#)

Anti-COVID-19 Spike glycoprotein Antibody - Images

Anti-COVID-19 Spike glycoprotein Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of COVID-19 Spike glycoprotein. The exact sequence is proprietary.