

## Recombinant SARS-CoV-2 Spike protein, S1 (RBD aa319-589)

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**Catalog No:** 81344, 81644

**Expressed In:** 293 cells

**Quantity:** 100, 1000 µg

**Concentration:** 1 µg/µl

**Source:** Virus

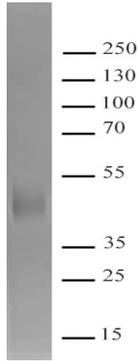
**Buffer Contents:** Recombinant SARS-CoV-2 Spike protein is supplied in 25 mM Tris-HCl, pH 8.0, 270 mM NaCl, and 10% glycerol.

**Background:** COVID-19, which is short for coronavirus disease 2019, is the official name of the respiratory disease caused by infection with the novel coronavirus SARS-CoV-2. The virus that causes COVID-19 was named SARS-CoV-2 because it is a coronavirus genetically similar to, yet distinct from, the virus that caused the severe acute respiratory syndrome (SARS) outbreak in 2003. Studying the details of how this virus replicates and causes the disease will allow scientists and physicians to more rapidly develop fast and accurate methods of detection as well as to deploy therapeutic and vaccine strategies.

**Protein Details:** Recombinant SARS-CoV-2 Spike protein was expressed in 293 cells and contains a C-terminal 6XHis-Tag with an observed molecular weight of 45 kDa. The recombinant protein is >90% pure by SDS-PAGE.

**Application Notes:** This product was manufactured as described in Protein Details and has been validated for use in ELISA. All available data for the protein is shown.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



**Recombinant SARS-CoV-2 Spike protein, S1 (aa319-589) protein gel.**

1 µg of SARS-CoV-2 Spike protein was run on a 4-12% SDS-PAGE gel, stained with Coomassie blue.  
MW: 40 kDa  
Purity: >90%

**SARS-CoV-2 Spike protein, S1 RBD Competition and Blocking Activity Assay**

A) SARS-CoV-2 Spike Antibody (clone AM001414) competes with ACE2 receptor for RBD binding. SARS-CoV-2 Spike Antibody (clone AM001414) was serially diluted in the presence of 100 ng/mL biotinylated ACE2 receptor, then added to wells coated with 1 µg/mL RBD, aa 319-589 for 30 min. Streptavidin-HRP was then added to detect bound ACE2 receptor. B) SARS-CoV-2 Spike Antibody (clone AM001414) blocks ACE2 receptor from binding to RBD. Serial dilutions of SARS-CoV-2 Spike Antibody (clone AM001414) was added to wells coated with 1 µg/mL RBD, aa 319-589. 100 ng/mL biotinylated ACE2 receptor was then added for 30 min, followed by Streptavidin-HRP to detect bound ACE2 receptor.

