

PRODUCT INFORMATION



SARS-CoV-2 Spike Glycoprotein Receptor Binding Domain (human IgG1 Fc-tagged)

Item No. 30429

Overview and Properties

Synonyms: SARS-CoV-2 Surface Receptor Binding Domain, Severe Acute Respiratory Syndrome Coronavirus 2 Spike Glycoprotein Receptor Binding Domain

Source: Recombinant protein from the receptor-binding domain (RBD) of SARS-CoV-2 (2019-nCoV) Spike S1 of Wuhan pneumonia virus (MN908947.3) with a C-terminal human IgG1 Fc tag expressed in HEK293 cells

Amino Acids: 319-541

Molecular Weight: 52.3 kDa

Storage: -80°C (as supplied)

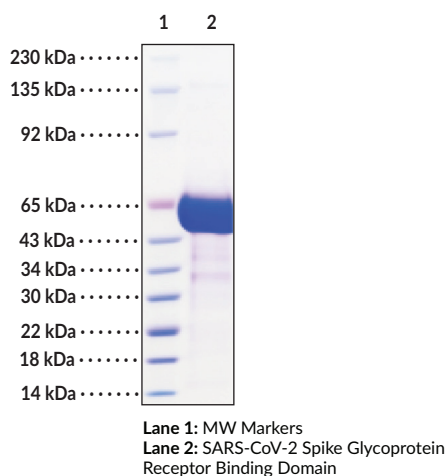
Stability: ≥1 year

Purity: ≥90% estimated by SDS-PAGE

Supplied in: 1 mg/ml in a solution of PBS, pH 7.2

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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Description

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped positive-stranded RNA virus, a member of the *Betacoronavirus* genus, and the causative agent of COVID-19.¹⁻⁵ The SARS-CoV-2 spike glycoprotein, also known as the surface glycoprotein, is located on the outer envelope of the virion.¹ It is composed of an S1 and S2 subunit divided by a furin S-cleavage site not found in other SARS-CoVs.^{6,7} The S1 subunit contains the receptor-binding domain (RBD), which binds to the carboxypeptidase angiotensin-converting enzyme 2 (ACE2), and the S1 and S2 subunits are cleaved by the protease TMPRSS2 to facilitate viral fusion with the host cell membrane.⁸⁻¹⁰ In this way, ACE2 acts as the functional receptor for SARS-CoV-2. Cayman's SARS-CoV-2 Spike Glycoprotein Receptor Binding Domain (human IgG1 Fc-tagged) protein can be used as an antigen or for Western blot, ELISA, protein-protein interaction studies, and other *in vitro* binding and *in vivo* functional assays.

References

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