

TECHNICAL DATA SHEET

SARS-CoV-2 Spike Glycoprotein-S1 RBD (319-541, biotinylated)

Novel Coronavirus 2019 Glycoprotein-S1 Receptor Binding Domain (Amino Acid 319-541) biotinylated, recombinant

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
1 µg	2218.V20.002		
5 µg	2218.V20.010		
50 µg	2218.V20.100		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant Spike Glycoprotein S1 Receptor Binding Domain, derived from HEK293 cells is a glycosylated protein consisting of Amino acid 319-341, fused to A His-Tag and Avi-Tag at the C-terminal. It is derived from the Wuhan-Hu-1 strain. SARS-CoV-2, formerly termed 2019-nCoV, causes the pandemic COVID-19 disease, a viral pneumonia. The production in HEK293 cells ensures the most authentic post-translational modifications.

The SARS-CoV-2 shares an 87% identity to two bat-derived severe acute respiratory syndrome 2018 (SARS-like) coronaviruses found in Zhoushan of eastern China. It is more distant from SARS-CoV (79%) identity and MERS-CoV (50%) identity. SARS-CoV-2 has an analogous receptor-binding domain-structure to that of 2018 SARS-CoV, even though there is a.a. diversity so thus the 2019-nCoV might bind to ACE2 receptor protein (angiotensin-converting enzyme 2) in humans.

While bats are possibly the host of SARS-CoV, researchers suspect that animal from the ocean sold at the seafood market was an intermediate host. RSCU analysis proposes that the SARS-CoV-2 is a recombinant within the viral spike glycoprotein between the bat coronavirus and an unknown coronavirus.

- **Sequence Strain** Wuhan-Hu-1
- **Source** HEK293
- **Purity** ≥ 90 % (SDS-PAGE)
- **Stabilizer** Trehalose (5%)
- **Buffer** PBS (pH 7,4)*
- **Physical state** lyophilized

Stability

The protein is stable until the lot specific expiry date if stored at -24°C or below. At room temperature it is stable for at least two weeks and to avoid repeated freeze thaw cycles we recommend short term (1-2-weeks) storage at 2°C - 4°C.

Please avoid repeated freeze thaw cycles.

Reconstitution

We recommend a quick spin followed by reconstitution in water to a concentration of at least 100µg/ml, this solution can then be further diluted.

Do not vortex.

* The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

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