SARS-CoV-2 Spike Protein (RBD)

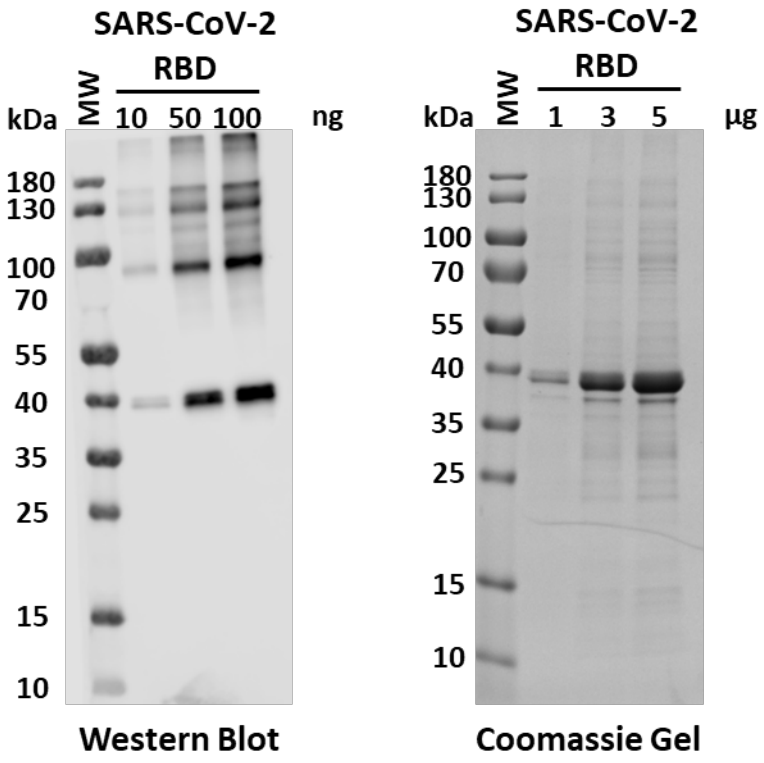
Cat. # CV2004

Background: Within the last two decades, SARS and MERS coronaviruses emerged as global health concerns causing severe acute respiratory syndromes. In December 2019, a novel coronavirus (SARS-CoV-2) was identified in Wuhan, Hubei province in China (1-3). The SARS-CoV-2 genome encodes several structural proteins including the Spike glycoprotein (S glycoprotein), which plays a crucial role in the infection of the host. The N-terminal part of the Spike protein (S1, residues 1-685) initiates the infection process by attaching the virus to host receptors (ACE2, CLEC4M/DC-SIGNR) located on the cell membrane (5-6). This interaction, which leads to the internalization of the virus into endosomes, is mediated by a stretch of amino acids (residues 319-545) named the receptor binding domain (RBD). The S Protein RBD represents a valuable tool for drug discovery programs targeting SARS-CoV-2 infection.

Alternate names:

Product Information

Molecular Weight:	25.5 kDa (residues 319-545)
Quantity:	100 µg
Physical State:	Liquid
Species:	SARS-CoV-2
Tag:	His_6-SUMO
Activity:	
Storage:	-80° C. Avoid repeated freeze/thaw cycles.



References

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3) Zhu N, Zhang D, Wang W, et al. A Novel Coronavirus from Patients with Pneumonia in China, 2019. N. Engl. J. Med. 2020;382(8):727–733.

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6) Yan R, Zhang Y, Li Y, et al. Structural basis for the recognition of SARS-CoV-2 by full-length human ACE2. Science (80-.). 2020;367(6485):1444–1448.