

Product Data Sheet

Recombinant COVID-19 S-trimer Protein (Omicron, B.1.1.529)

Catalog #	Source	Reactivity	Applications
CRP3133	Human cells	COVID-19	E, WB, SDS-PAGE, MS
Description	Recombinant COVID-19 S-trimer Protein (Omicron, B.1.1.529) is produced by our mammalian expression system and the target gene encoding Cys15-Gln1208 is expressed with a 6His tag at the C-terminus. A67V, HV69-70del, T95I, G142D, VYY143-145del, N211del, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H, N764K, D796Y, N856K, Q954H, N969K and L981F mutations were identified in the COVID-19 variant (known as Omicron/B.1.1.529 lineage) which emerged in South Africa. Two proline substitutions and furin cleavage site substitutions are introduced to stabilize the trimeric prefusion state of COVID-19 S protein and abolish the furin cleavage site, respectively.		
Form	Liquid in a 0.2 µm filtered solution of PBS, pH 7.4.		
Gene Symbol			
Alternative Names	SARS-CoV-2 RBD Protein; SARS-CoV-2 Spike RBD Protein; SARS-CoV-2 S Protein RBD		
Entrez Gene	43740568 (COVID-19)		
SwissProt	P0DTC2 (COVID-19)		
Purity	Greater than 95% as determined by reducing SDS-PAGE.		
Chemical Structure			
Quality Control	Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.		
Directions for Use	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not		

Application key: E- ELISA, WB- Western blot, IH- Immunohistochemistry, IF- Immunofluorescence, FC- Flow cytometry, IC- Immunocytochemistry, IP- Immunoprecipitation, ChIP- Chromatin Immunoprecipitation, EMSA- Electrophoretic Mobility Shift Assay, BL- Blocking, SE- Sandwich ELISA, CBE- Cell-based ELISA, RNAi- RNA interference

Species reactivity key: H- Human, M- Mouse, R- Rat, B- Bovine, C- Chicken, D- Dog, G- Goat, Mk- Monkey, P- Pig, Rb- Rabbit, S- Sheep, Z- Zebrafish

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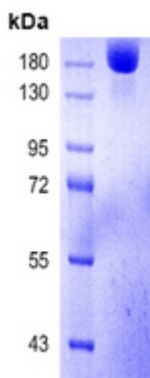
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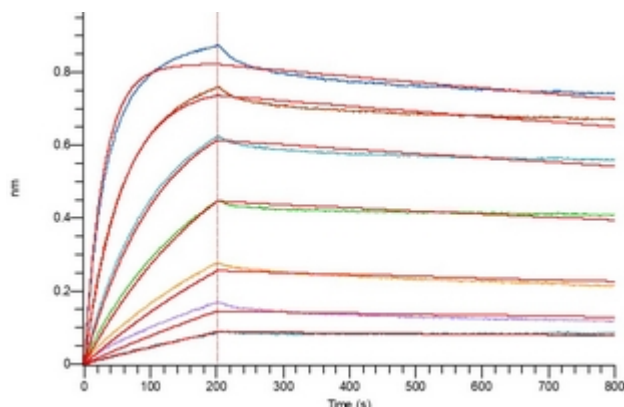
recommended to reconstitute to a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Storage/Stability

Store it at -20°C to -80°C for one year. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.



Greater than 95% as determined by reducing SDS-PAGE.



Loaded Human ACE-2 on Protein A Biosensor, can bind Recombinant COVID-19 S-trimer Protein (Omicron, B.1.1.529) with an affinity constant of 0.5 nM as determined in bioactivity assay.

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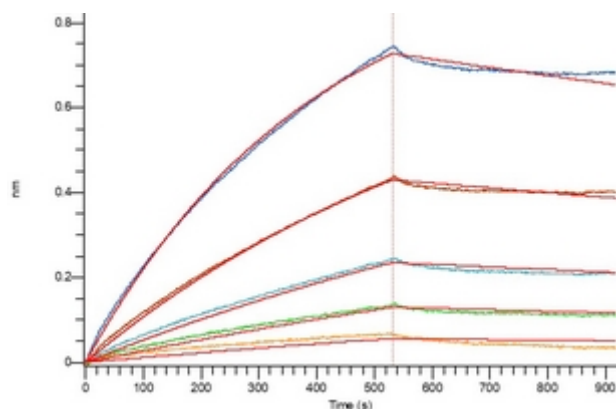
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Loaded Anti-COVID-19 S1 mAb on Protein A Biosensor, can bind Recombinant COVID-19 S-trimer Protein (Omicron, B.1.1.529) with an affinity constant of 10.7 nM as determined in bioactivity assay.

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Species reactivity key: H- Human, M- Mouse, R- Rat, B- Bovine, C- Chicken, D- Dog, G- Goat, Mk- Monkey, P- Pig, Rb- Rabbit, S- Sheep, Z- Zebrafish

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