

Active Recombinant COVID-19 Spike RBD protein(BA.3/Omicron), His-tagged

Cat. No. Spike-731V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant COVID-19 Spike RBD protein(BA.3/Omicron)(Arg 319 - Lys 537)(Accession # QHD43416.1 (G339D,S371F,S373P,S375F,D405N,K417N,N440K,G446S,S477N,T478K,E484A,Q493R,Q498R,N501Y,Y505H) fused with His tag at the C-terminus, was expressed in HEK293.
Species	Sars-CoV-2
Source	HEK293
ProteinLength	Arg 319 - Lys 537
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.
Bio-activity	Immobilized SARS-CoV-2 Spike RBD, His Tag (BA.3/Omicron) at 2 µg/mL (100 µL/well) can bind Human ACE2 Fc Tag with a linear range of 1-31 ng/mL.
Molecular Mass	The protein has a calculated MW of 26.8 kDa. The protein migrates as 33-37 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per µg by the LAL method.
Purity	>95% as determined by SDS-PAGE. >95% as determined by SEC-MALS.

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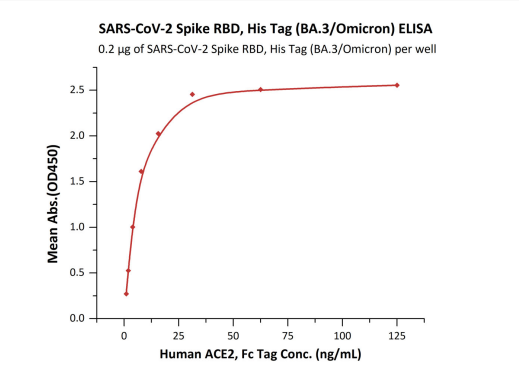
 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Storage	This product is stable after storage at: -20°C to -70°C for 12 months in lyophilized state; -70°C for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name	S surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
Official Symbol	Spike
Synonyms	Spike; S1 protein; Spike glycoprotein Subunit1; S glycoprotein Subunit1; Spike protein S1; COVID-19 Omicron
Gene ID	43740568
Protein Refseq	YP_009724390.1
UniProt ID	P0DTC2

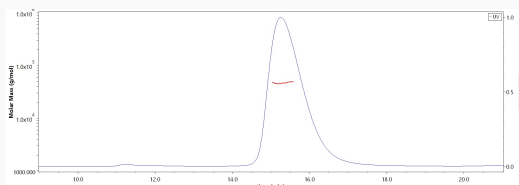
Bioactivity-ELISA	 SARS-CoV-2 Spike RBD, His Tag (BA.3/Omicron) ELISA 0.2 µg of SARS-CoV-2 Spike RBD, His Tag (BA.3/Omicron) per well Mean Abs. (OD450) Human ACE2, Fc Tag Conc. (ng/mL) <table border="1"> <caption>Approximate data points from the ELISA graph</caption> <thead> <tr> <th>Human ACE2, Fc Tag Conc. (ng/mL)</th> <th>Mean Abs. (OD450)</th> </tr> </thead> <tbody> <tr><td>0</td><td>0.0</td></tr> <tr><td>5</td><td>0.5</td></tr> <tr><td>10</td><td>1.0</td></tr> <tr><td>15</td><td>1.6</td></tr> <tr><td>20</td><td>2.0</td></tr> <tr><td>25</td><td>2.2</td></tr> <tr><td>30</td><td>2.4</td></tr> <tr><td>50</td><td>2.5</td></tr> <tr><td>75</td><td>2.5</td></tr> <tr><td>100</td><td>2.5</td></tr> <tr><td>125</td><td>2.5</td></tr> </tbody> </table>	Human ACE2, Fc Tag Conc. (ng/mL)	Mean Abs. (OD450)	0	0.0	5	0.5	10	1.0	15	1.6	20	2.0	25	2.2	30	2.4	50	2.5	75	2.5	100	2.5	125	2.5
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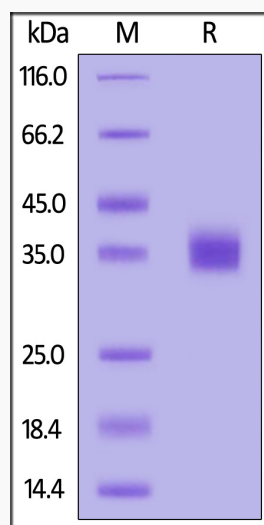
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SEC-MALS



SDS-PAGE



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