

**Spike Glycoprotein Receptor Binding Domain (RBD) from SARS-Related Coronavirus 2, B.1.1.529 (Omicron) with C-Terminal Histidine Tag, Recombinant from HEK293 Cells**

**Catalog No. NR-56465**

**Sino Biological Catalog No. 40592-V08H121**

**Product Description:**

A recombinant form of the spike glycoprotein receptor binding domain (RBD) from severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), B.1.1.529 (Omicron) which originated in South Africa was produced by transfection in human embryonic kidney HEK293 cells and purified. The RBD (amino acid residues R319 to F541 according to the numbering of GenPept: [YP\\_009724390](#)), contains mutations: G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H and features a C-terminal poly-histidine tag.

**Lot: MA15DE1303**

**Manufacturing Date: 13DEC2021**

TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Transparent liquid, free of foreign material	Transparent liquid, free of foreign material
<b>Purity</b> SDS-PAGE and Quantitative Densitometry <sup>1</sup> SEC-HPLC	Target protein band(s) > 95 ± 3% Target protein band(s) > 95%	Target protein band(s) 98.8% Target protein band(s) 99.2%
<b>Concentration (A<sub>280</sub>)</b>	Report results	0.66 mg/mL
<b>Final Product</b> Amount per vial	Report results	50 µg
<b>Functional ELISA</b>	Positive	Positive
<b>pH</b>	7.4 ± 0.5	7.4 ± 0.5
<b>Endotoxin Content</b> <b>(Limulus Amoebocyte Lysate Assay)</b>	< 1 EU/µg	< 1 EU/µg

<sup>1</sup>The recombinant protein migrated to a slightly larger size than was expected, likely caused by glycosylation common in recombinant spike proteins derived from coronaviruses. For more information, please see Chakraborti, S., et al. "The SARS Coronavirus S Glycoprotein Receptor Binding Domain: Fine Mapping and Functional Characterization." *Virology*, 2 (2005): 73. PubMed: 16122388.

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