SARS-CoV-2 Spike RBD (Omicron BA.2.75) Protein





Description	
Source	Recombinant SARS-CoV-2 Spike RBD (Omicron BA.2.75) Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Arg319-Phe541(G339H, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, G446S, N460K, S477N, T478K, E484A, Q498R, N501Y, Y505H).
Accession	QHD43416.1
Molecular Weight	The protein has a predicted MW of 26.12 kDa. Due to glycosylation, the protein migrates to 35-43 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE
	> 95% as determined by HPLC
Formulation and	d Storage
Formulation	Complied as 0.00 cm filtered calculation in DDC (nU.7.4)

Formulation Supplied as 0.22µm filtered solution in PBS (pH 7.4).

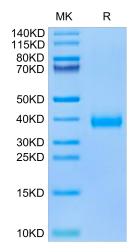
Storage Valid for 12 months from date of receipt when stored at -80°C.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The ongoing coronavirus disease 2019 (COVID-19) pandemic has prioritized the development of small-animal models for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The resulting mouse-adapted strain at passage 6 (called MASCp6) showed increased infectivity in mouse lung and led to interstitial pneumonia and inflammatory responses in both young and aged mice after intranasal inoculation. Deep sequencing revealed a panel of adaptive mutations potentially associated with the increased virulence. In particular, the N501Y mutation is located at the receptor binding domain (RBD) of the spike protein.

Assay Data

Tris-Bis PAGE

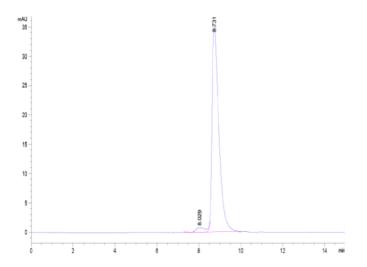


SEC-HPLC

SARS-CoV-2 Spike RBD (Omicron BA.2.75) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

KAGTUS

Assay Data

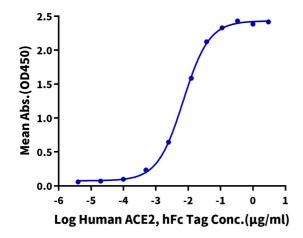


The purity of SARS-CoV-2 Spike RBD (Omicron BA.2.75) is greater than 95% as determined by SEC-HPLC.

ELISA Data

SARS-COV-2 Spike RBD (Omicron BA.2.75), His Tag ELISA

0.05μg SARS-COV-2 Spike RBD (Omicron BA.2.75), His Tag Per Well



Immobilized SARS-COV-2 Spike RBD (Omicron BA.2.75) , His Tag at $0.5\mu g/ml$ ($100\mu l/Well$) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 7.0ng/ml determined by ELISA.