SARS-CoV-2 Spike S1 Omicron BA.5

Catalogue #	P-380-100
Description:	Protein contains amino acids 14-681, mutations T19I, L24S, del25/27, del69-70, G142D, V213G, G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452R, S477N, T478K, E484A, F486V, Q498R, N501Y, Y505H, D614G, H655Y, N679K, P681H, two extra amino acids (AS) in N-terminus, His-6 tag at C-terminus and GSG linker between protein and tag.
Uniprot ID:	P0DTC2
MW:	75.381 kDa
Host:	CHO-based cell line (expressed by QMCF Technology)
Dissociation constant (K_D):	2.03E-08 (measured against ACE2 receptor)
Purification:	Metal-affinity chromatography followed by gel filtration. Protein is sterile-filtrated through 0.22 µm filter.
Purity:	>95%
Concentration:	1 mg/ml
Buffer:	PBS pH 7.4
Endotoxine:	NA
QC:	Simply Blue Safe stained SDS-PAGE, analytical SEC, Octet Binding to ACE2 receptor
Shipping:	Shipped on dry ice
Storage:	Store at -70°C upon receipt. Recommended to aliquot into smaller quantities. Avoid repeated freeze-thaw cycles

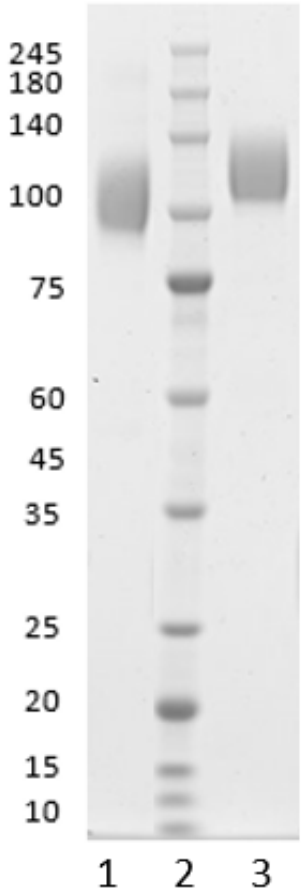

Figure 1. Simply Blue Safe stained SDS-PAGE analysis of SARS-CoV-2 Spike S1 Omicron BA.5. 4-12% gradient gel is used for analysis. **Lane 1.** 0.8 µg SARS-CoV-2 Spike S1 Omicron BA.5 (-DTT) **Lane 2.** Protein marker (Smobio) **Lane 3.** 0.8 µg SARS-CoV-2 Spike S1 Omicron BA.5 (+DTT)

Peak Table

Peak #	RT (min)	Area	Area %
1	8.342	2349.19	98.99
2	10.181	23.99	1.01

Chromatogram

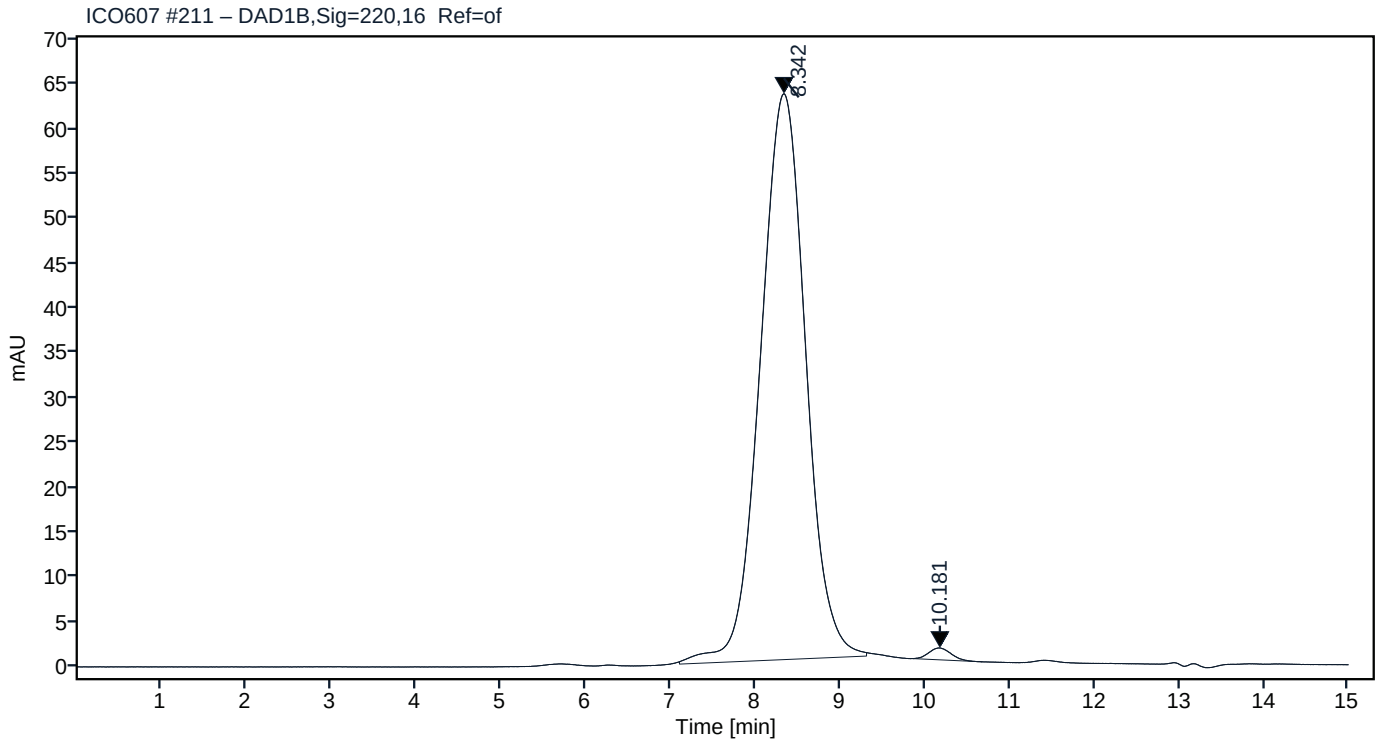

Figure 2. HPLC analytical SEC for final product.

Peak Table

Peak #	RT (min)	Area	Area %
1	8.341	2468.32	98.98
2	10.168	25.44	1.02

Chromatogram

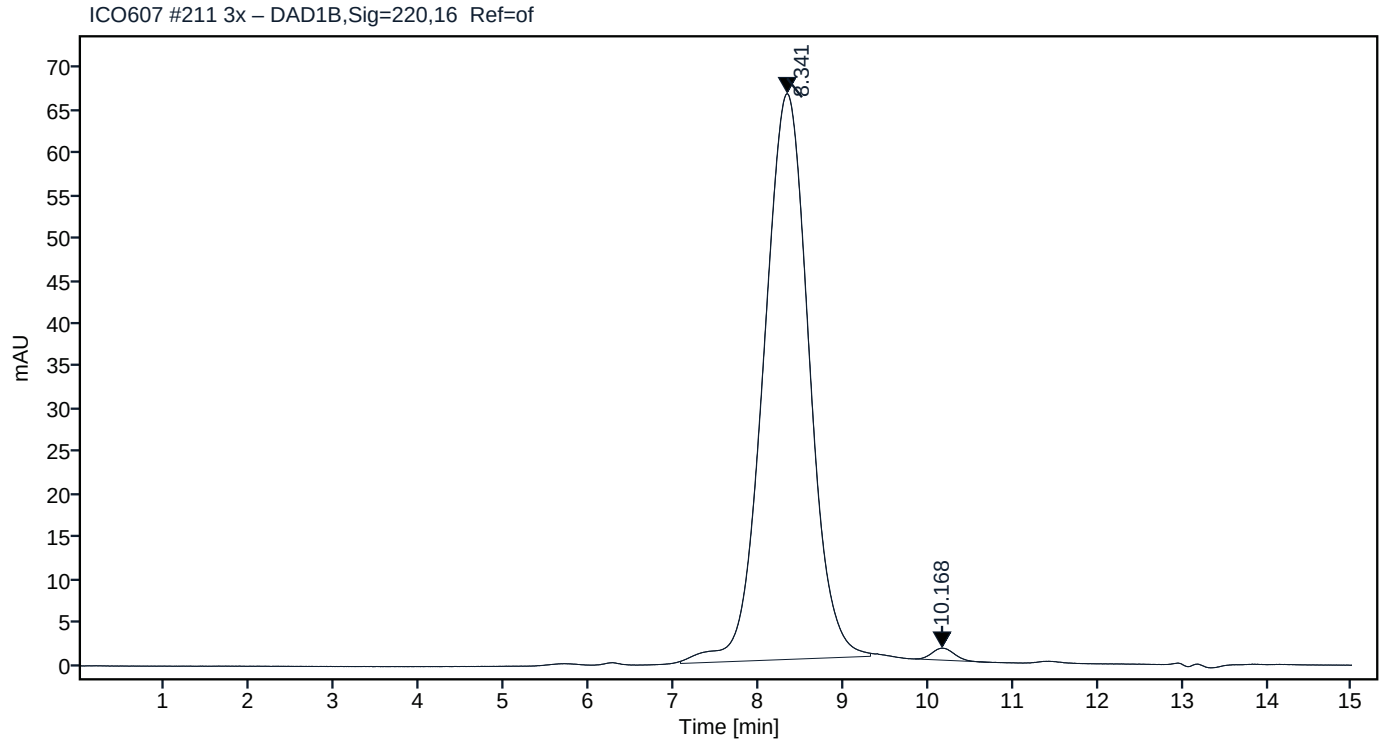

Figure 3. HPLC analytical SEC after 3 freeze-thaw cycles.

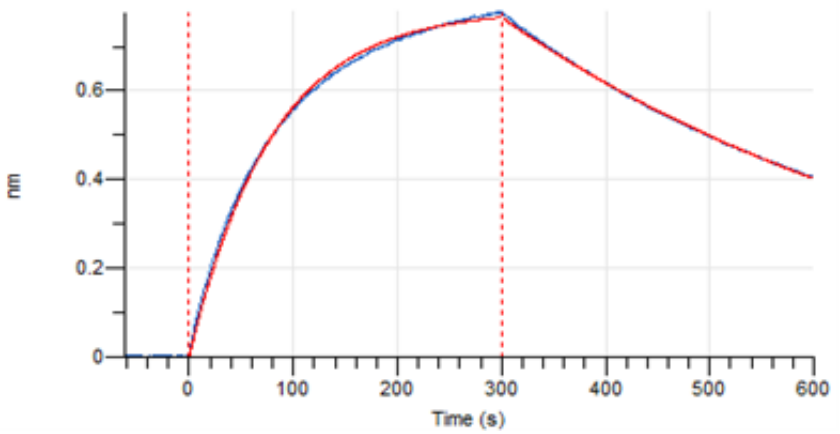

Figure 4. Octet RED96e analysis of SARS-CoV-2 S1 Omicron protein binding to the ACE2 receptor.