SARS-CoV-2 Trimeric Spike UK VOC 202012/01 (alpha)

Catalogue #	P-317-100
Description:	Protein contains amino acids 14-1211 and following mutations: HV 69-70 del, Y144 del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H. Plus two extra amino acids (AS) in N-terminus, trimerization domain and His-6 tag at C-terminus, GS linker between protein and trimerization domain and GSG linker between trimerization domain and His-tag. Furin cleavage (RRAR) site between Spike S1 and S2 is mutated (GSAS). Also, two stabilizing prolines (PP) have been added to the S2 domain.
Uniprot ID:	P0DTC2
MW:	410 kDa
Host:	CHO-based cell line (expressed by QMCF Technology)
Purification:	Purified by Ni-affinity chromatography and gel-filtration from serum-free CHO growth media, sterile filtrated
Purity:	>95%
Concentration:	1 mg/ml
Buffer:	PBS pH 7.4
Endotoxine:	NA
Bioproperties:	Measured by its binding ability to ACE2 protein by OCTET RED96 system.
QC:	SDS-PAGE ,analytical SEC, Octet binding
Shipping:	Shipped on dry ice
Storage:	Store at -70°C upon receipt. Recommended to aliquot into smaller quantities. Avoid repeated freeze-thaw cycles

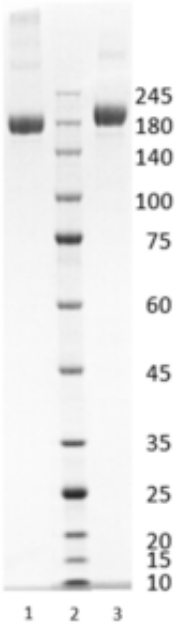

Figure 1. Simply Blue stained SDS-PAGE analysis of SARS-CoV-2 Trimeric Spike UK VOC 202012/01 . 4-12% gradient gel is used for analysis. Lane 1. 1.3 µg SARS-CoV-2 Trimeric Spike UK VOC 202012/01 (-DTT) Lane 2. Protein marker (Smobio) Lane 3. 1.3 µg SARS-CoV-2 Trimeric Spike UK VOC 202012/01 (+DTT)

Peak Table

Peak #	RT (min)	Area	Area %
1	6.543	4063.29	95.12
2	8.110	208.62	4.88

Chromatogram

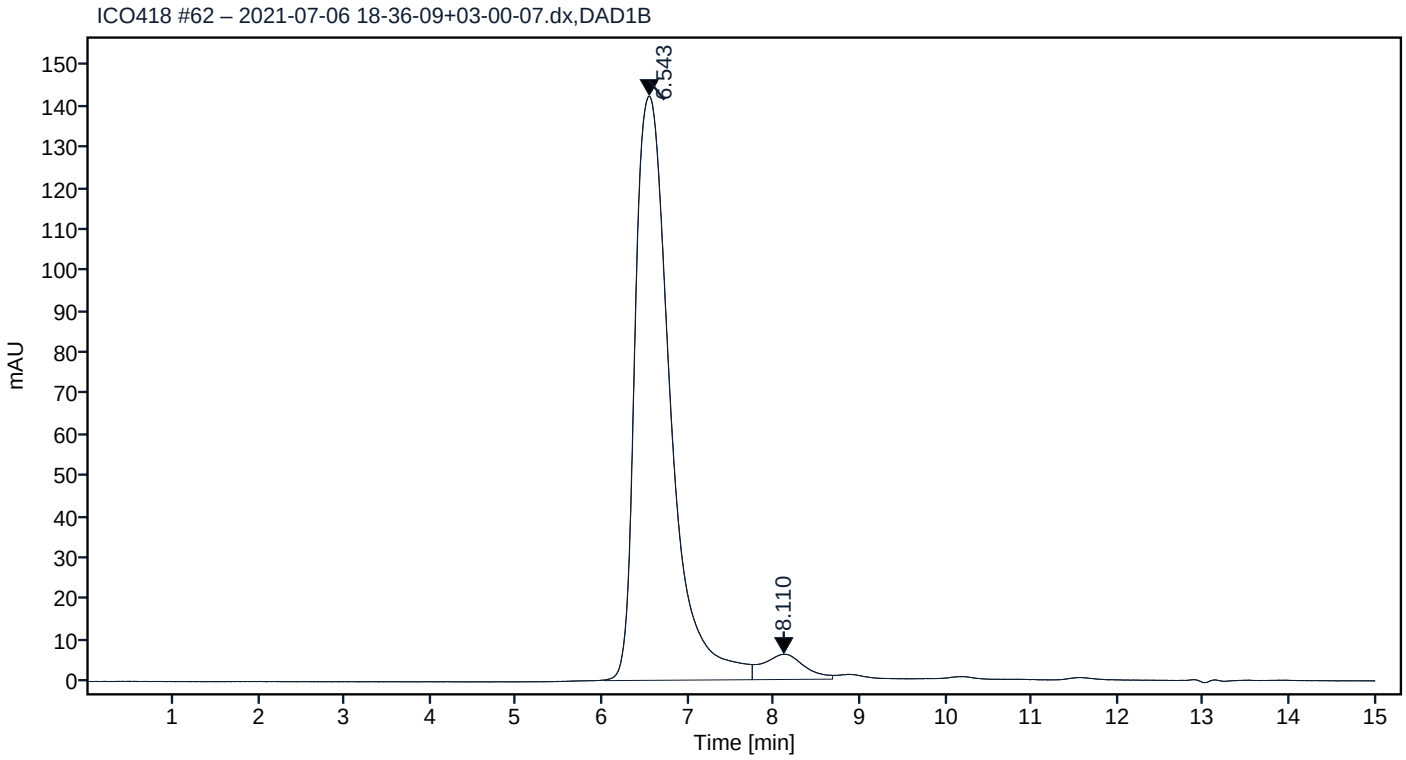

Figure 2. HPLC analytical SEC for final product.

Peak Table

Peak #	RT (min)	Area	Area %
1	6.513	3253.03	96.21
2	8.125	128.10	3.79

Chromatogram

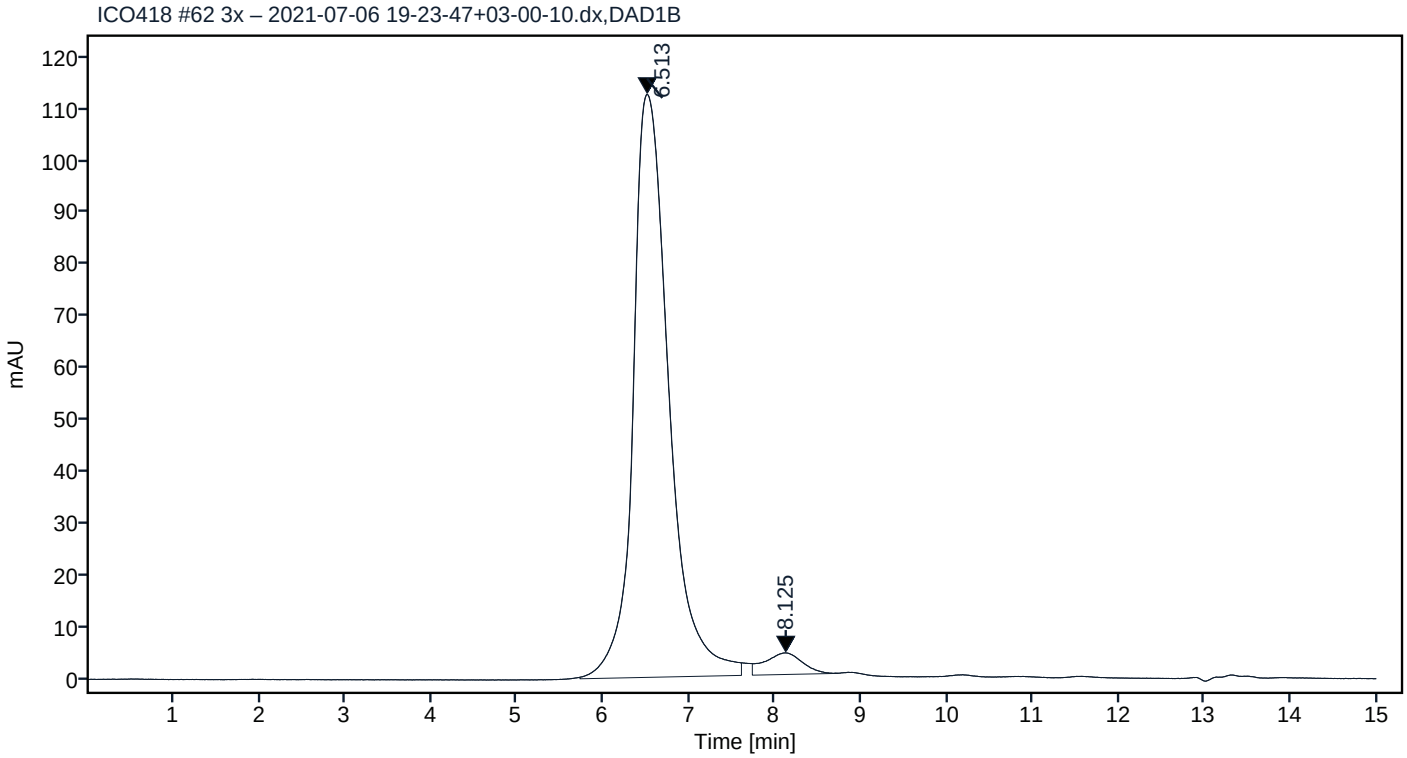

Figure 3. HPLC analytical SEC after 3 freeze-thaw cycles.

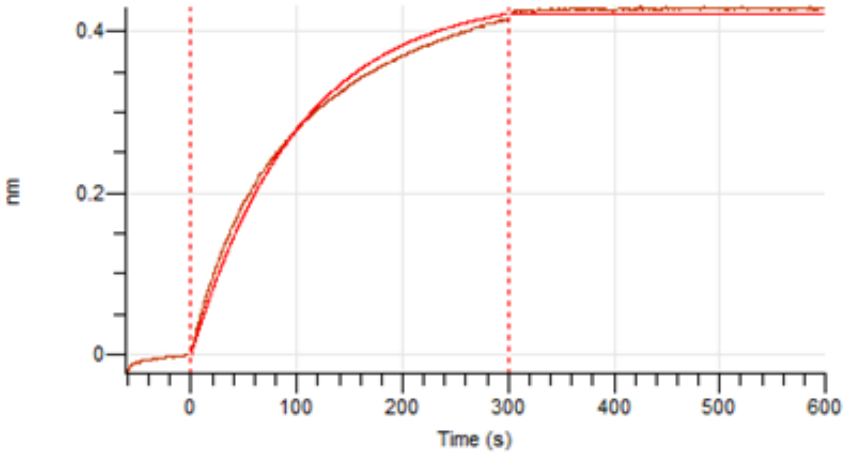

Figure 4. Octet Red96e analysis of SARS-CoV-2 Trimeric Spike UK VOC 202012/01 binding to human ACE2 receptor.