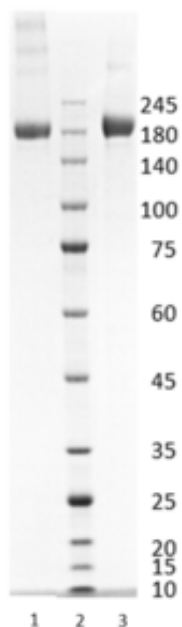


## SARS-CoV-2 Trimeric Spike Brazil P1 (gamma)

Catalogue #	P-318-100
Description:	Protein contains amino acids 14-1211 and following mutations: L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G, H655Y, T1027I, V1176F. 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:	411 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 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

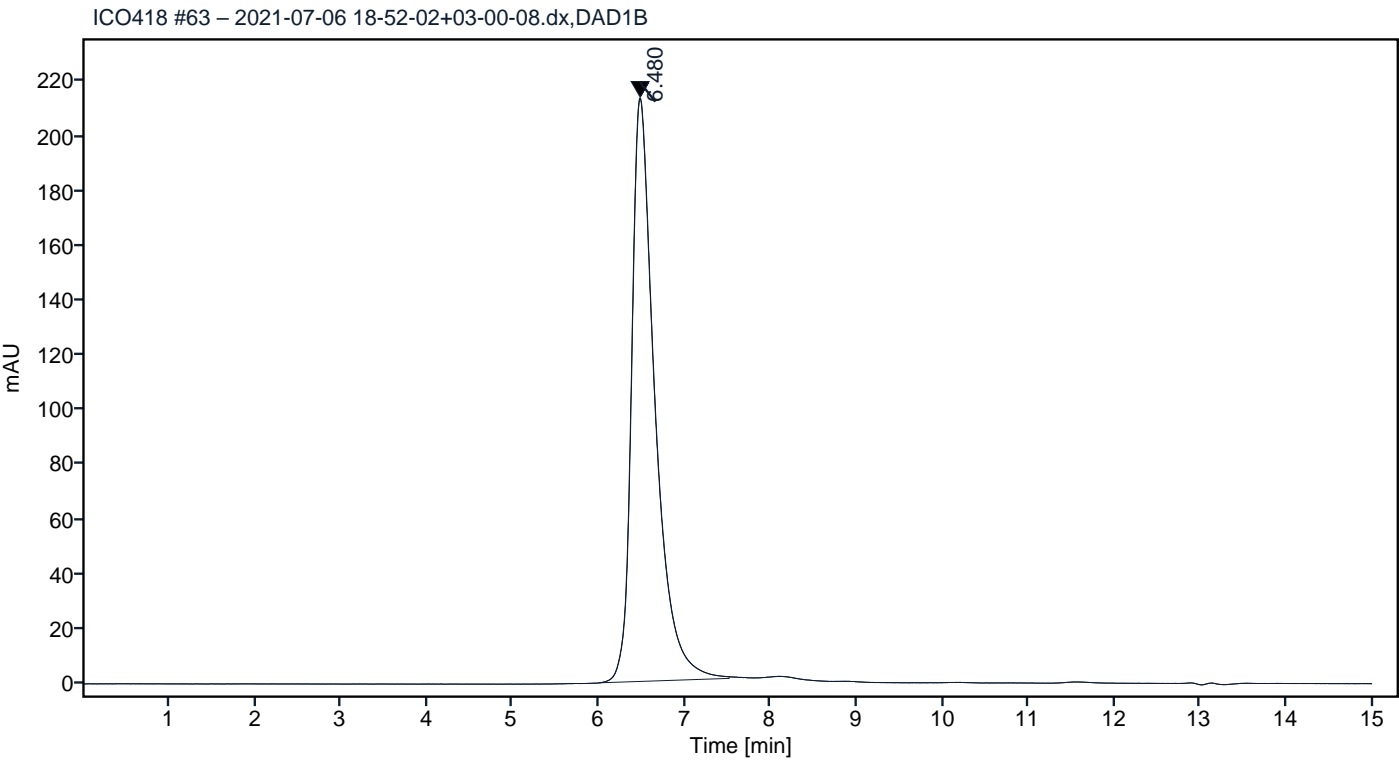


**Figure 1.** Simply Blue stained SDS-PAGE analysis of SARS-CoV-2 Trimeric Spike Brazil P1 . 4-12% gradient gel is used for analysis. Lane 1. 1.3  $\mu$ g SARS-CoV-2 Trimeric Spike Brazil P1 (-DTT) Lane 2. Protein marker (Smobio) Lane 3. 1.3  $\mu$ g SARS-CoV-2 Trimeric Spike Brazil P1 (+DTT).

Peak Table

Peak #	RT (min)	Area	Area %
1	6.480	4034.68	100.00

Chromatogram

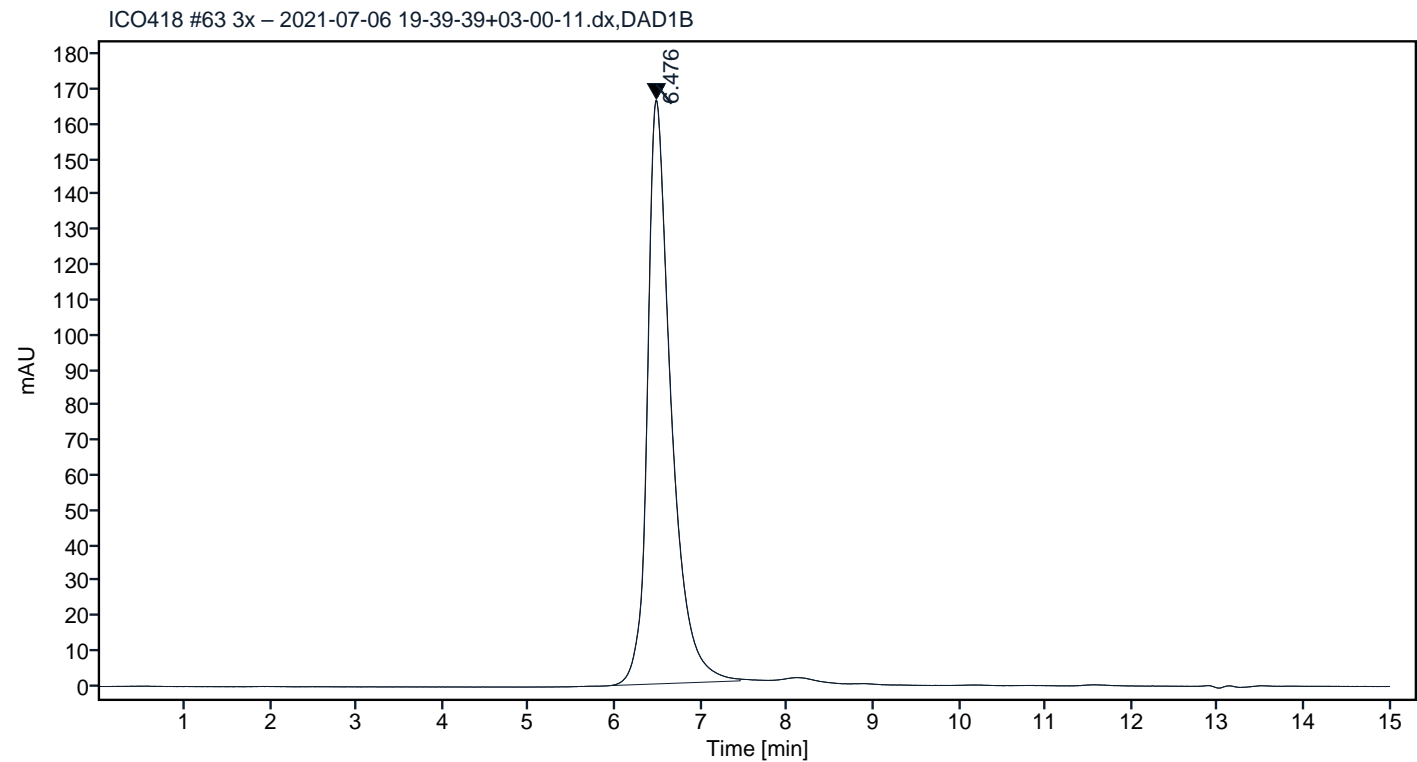


**Figure 2.** HPLC analytical SEC for final product.

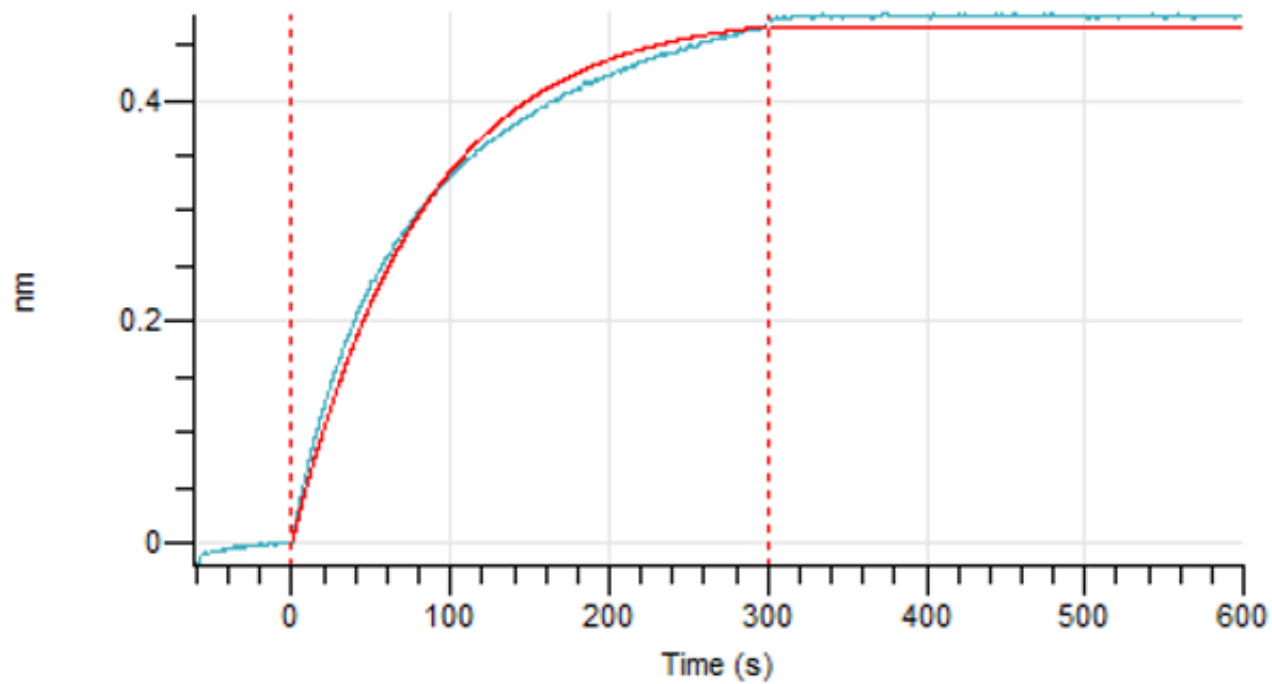
Peak Table

Peak #	RT (min)	Area	Area %
1	6.476	3190.23	100.00

Chromatogram



**Figure3.** HPLC analytical SEC after 3 freeze-thaw cycles.



**Figure 4.** Octet Red96e analysis of SARS-CoV-2 Trimeric Spike Brazil P1 binding to human ACE2 receptor.