



SARS-CoV-2 Spike S1 UK VOC 202012/01(alpha)

Catalogue #	P-310-100
Description:	cDNA encodes SARS-CoV-2 surface protein (YP_009724390.1) Protein contains amino acids 14-681, mutations HV 69-70 del, Y144 del, N501Y, A570D, P681H, D614G, two extra amino acids (AS) in N-terminus and His-6 tag at C-terminus and GSG linker between protein and tag.
MW:	75.82 kDa
Host:	CHO-based cell line (expressed by QMCF Technology)
Purification:	Metal-affinity chromatography following gel filtration. Protein is sterile-filtrated through 0.22 µm filter.
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 NanoDrop A280, 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

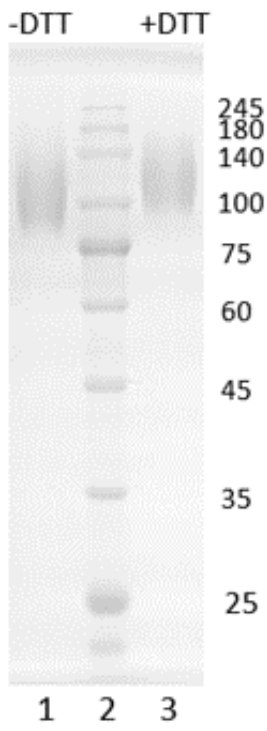


Figure 1. Coomassie-stained SDS-PAGE analysis of SARS-COV-2 S1 UK VOC 202012/01 . 4-15% gradient gel is used for analysis. Lane 1. 1.3 μ g SARS-CoV-2 Spike S1 UK VOC 202012/01 (-DTT) Lane 2. Protein marker (Smobio) Lane 3. 1.3 μ g SARS-CoV-2 Spike S1 UK VOC 202012/01 (+DTT).

Peak Table

Peak #	RT (min)	Area	Area %
1	7.448	5158.34	100.00

Chromatogram

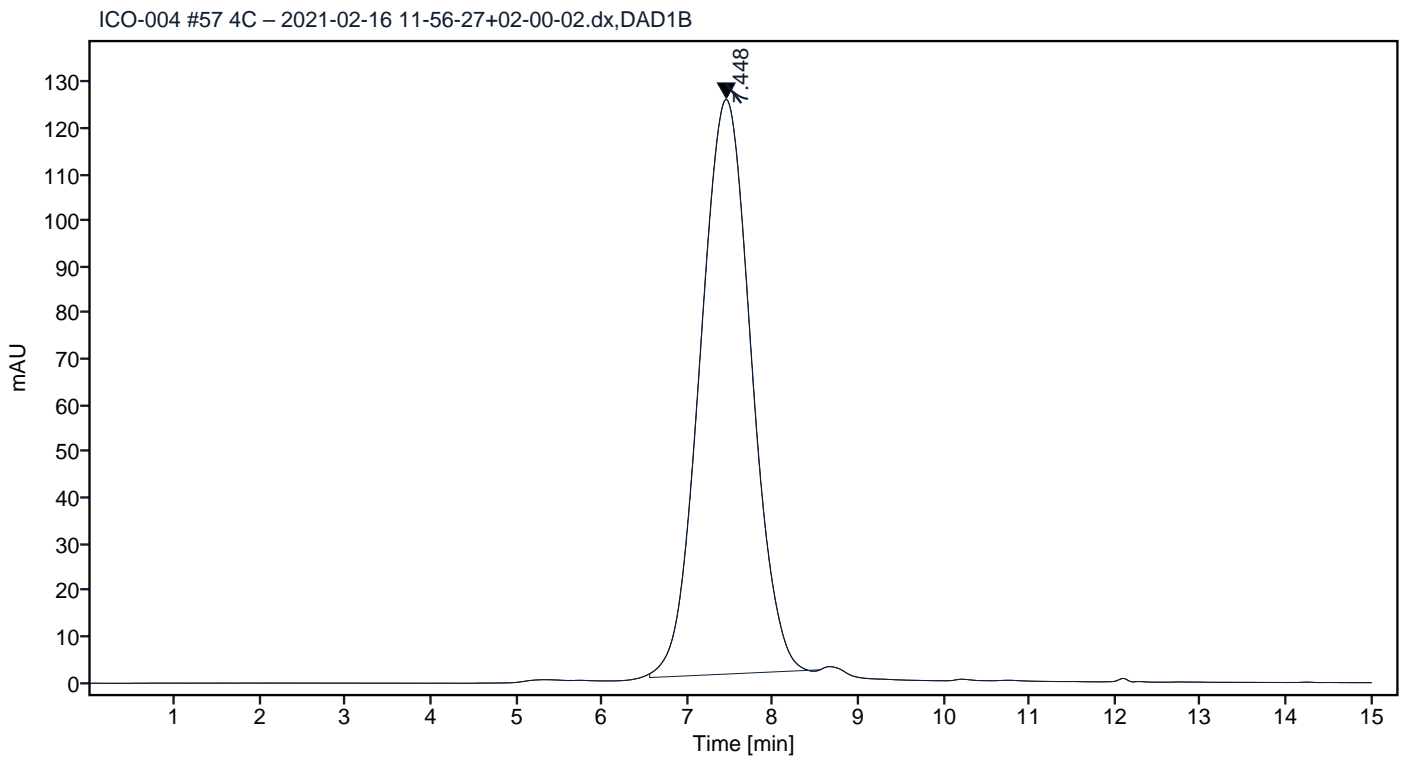


Figure 2. HPLC analytical SEC for final product.

Peak Table

Peak #	RT (min)	Area	Area %
1	7.446	5060.89	100.00

Chromatogram

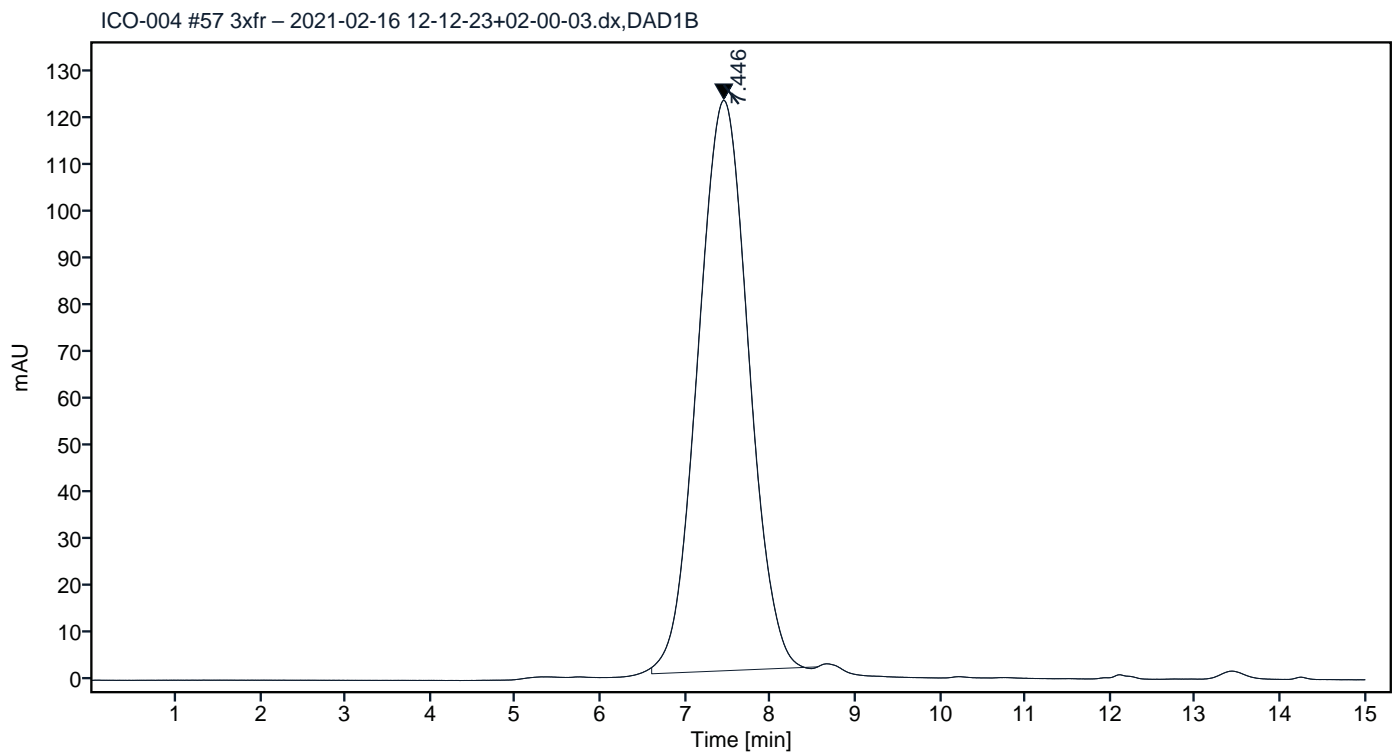


Figure 3. HPLC analytical SEC after 3 freeze-thaw cycles.

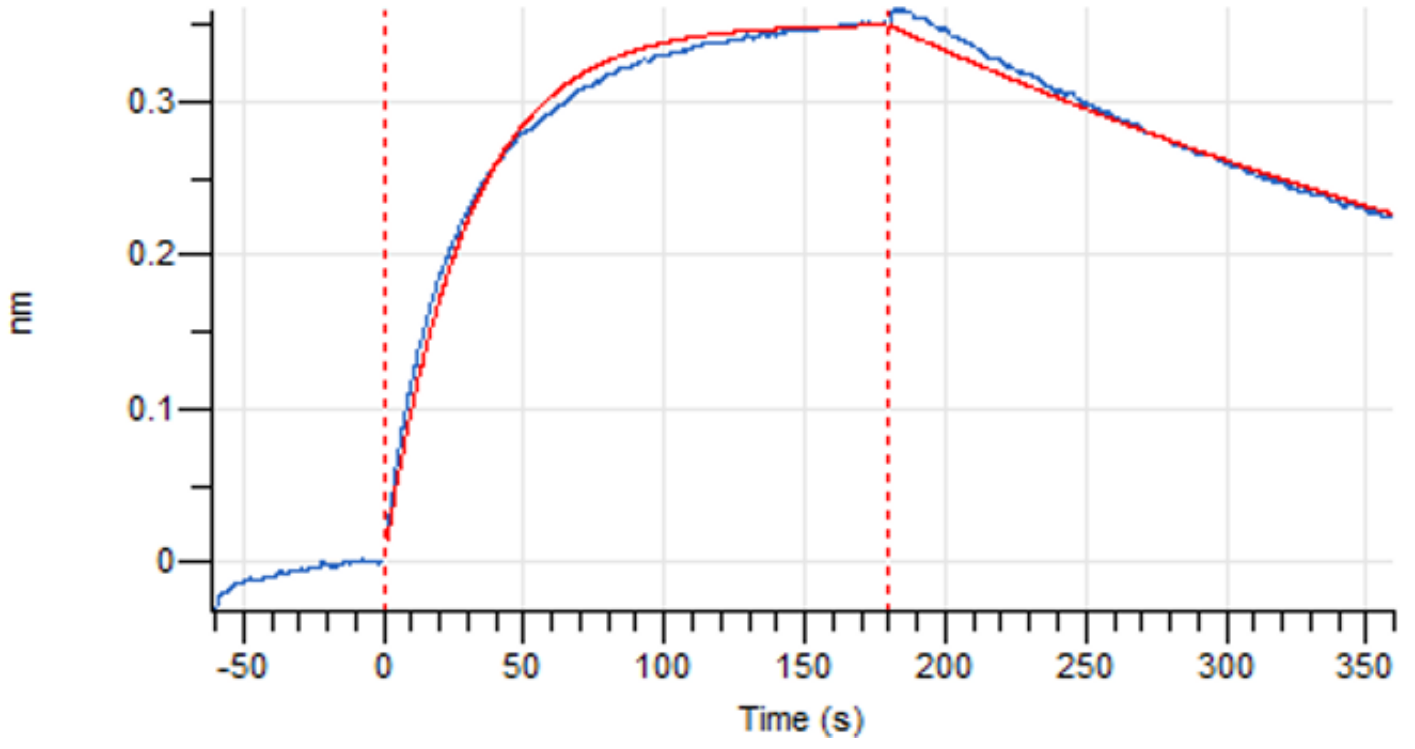


Figure 4. Octet RED96e analysis of SARS-CoV-2 S1 protein (wild type, red line) and S1 UK variant (blue line) binding to the ACE2 receptor.