



Fusion Antibodies, 1 Springbank Road,
Springbank industrial estate, Belfast, BT17 0QI

Certificate of Analysis

Product Name:	Recombinant SARS-CoV-2 (COVID-19) receptor binding domain (RBD) protein.
Product Code:	R029 RBD TEV AVI HIS
Lot number:	090720
Sequence:	Corresponding to amino acids 329-530 of Uniprot sequence PODTC2. A slightly truncated version of the canonical RBD comprising a single, discrete subdomain. Minimal additional amino acids have been added to C-terminal, which encompass a cleavable hexahistidine and Avi tag sequence. Full sequence available upon request.
Amount:	As required.
Concentration:	3.06 mg/ml
Buffer:	Phosphate-buffered saline pH 7.4
Preservative:	None present. 0.2 µm filtered.
Expression:	Expressed using Human Embryonic Kidney (HEK) cell line
Purification:	Purified from an animal origin-free culture supernatant by affinity chromatography.
Purity:	>90% (as determined by reducing and denaturing SDS-polyacrylamide gels [Fig.1])
Activity:	Binds anti-SARS-CoV-2 neutralising antibody, CC12.3 with nanomolar affinity (Fig. 2).
Applications:	As required.
Storage:	2-8°C.

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SDS-PAGE analysis

Purity of final antibody: R029 RBD AVI HIS

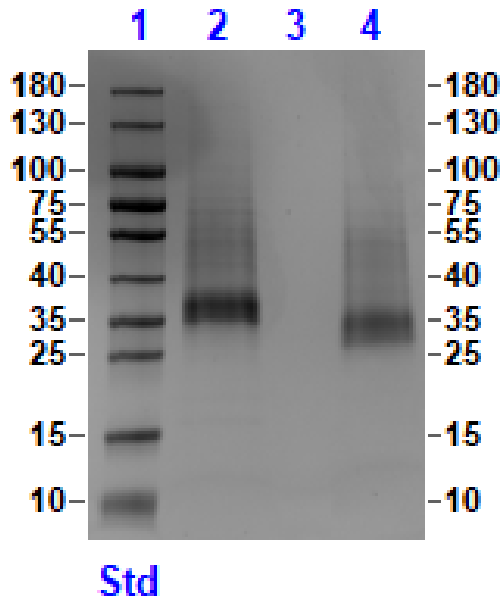


Figure 1: 4-20% denaturing, reducing non-reducing, SDS-PAGE analysis of RBD TEV AVI HIS. Molecular weight marker shown in kilodaltons. Lanes are as follows:

Lane Number	Sample	Lot	Amount (µg)	Conditions
1	PageRuler	NA	NA	Reducing
2	RBD TEV AVI HIS	090720	2	Reducing
3	blank	-	-	-
4	RBD TEV AVI HIS	090720	2	Non-Reducing

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Kinetic analysis

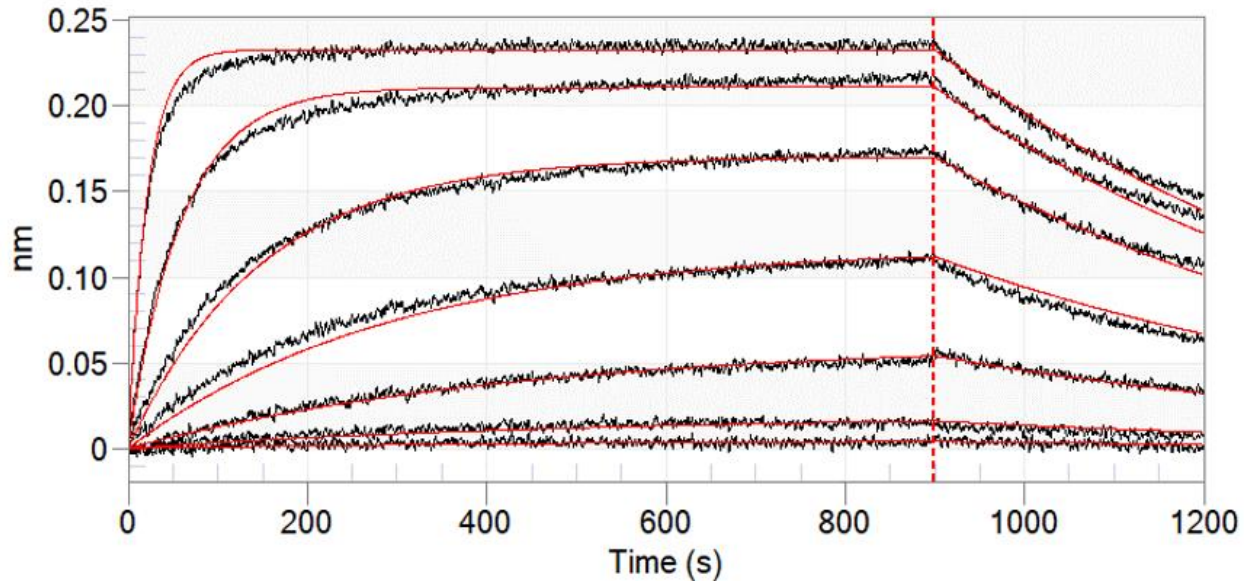


Figure 2. Anti-SARS-CoV-2 CC12.3 (human IgG) antibody (PBD ID = 6XC4) immobilised on an anti-human Fc (AHC) biosensor surface can bind SARS-CoV-2 RBD (Cat. No. R029 RBD TEV AVI HIS) with an affinity constant of 4 nM, as determined in a bio-layer interferometry assay (Octet RED96).