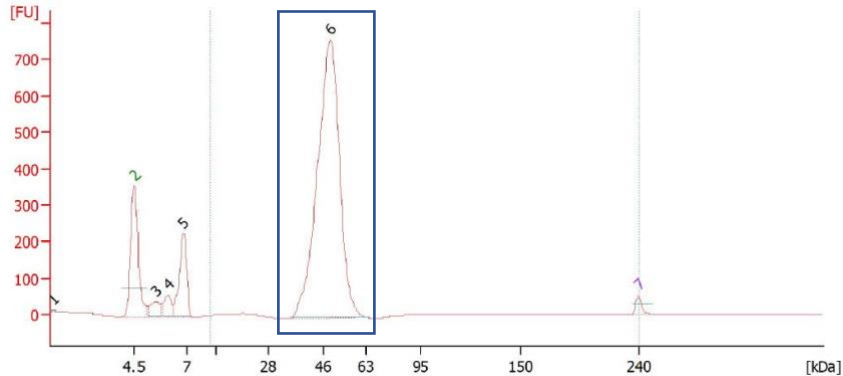
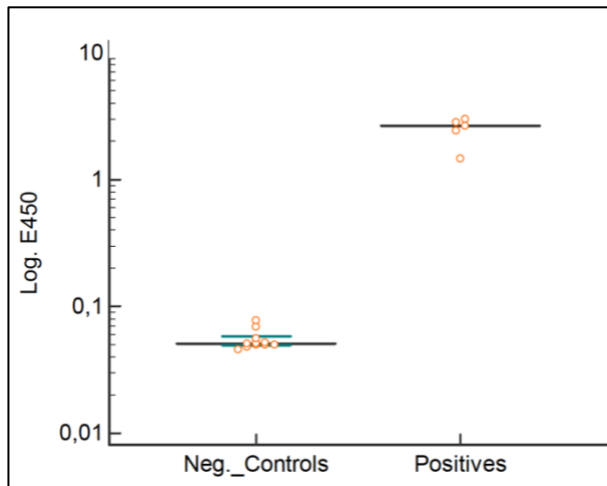




## PROCUT DATASHEET

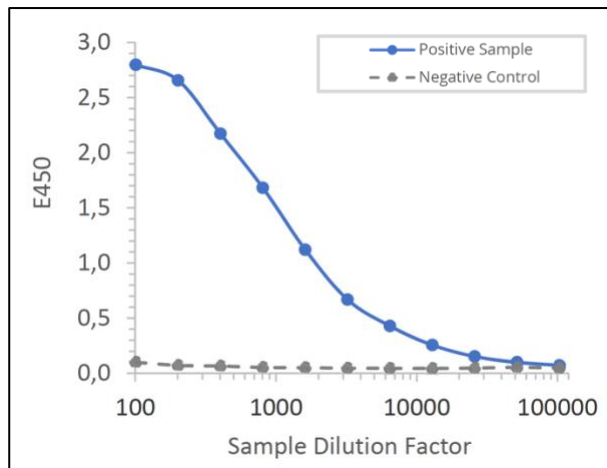
<b>Catalog No.:</b>	BSV-COV-PR-48HEK
<b>Pack Size:</b>	1 mg Please enquire at <a href="mailto:info@bioservuk.com">info@bioservuk.com</a> for bulk requirements
<b>Product Name:</b>	SARS-CoV-2 Receptor-Binding Domain (S1-RBD), His-Tag
<b>Description:</b>	Recombinant spike glycoprotein receptor binding domain (RBD) from severe acute respiratory syndrome-related coronavirus (SARS-CoV-2), Wuhan-Hu-1-isolate, produced under serum-free conditions in HEK-INV cells (In Vivo proprietary optimized; HEK293 cells).
<b>Species:</b>	2019-nCoV, COVID-19
<b>Sequence:</b>	The construct contains 223 residues of the SARS-CoV-2 Spike Glycoprotein Receptor-binding domain (RBD), representing amino acid residues 319 to 541 (aa 319-541). The protein is fused to the C-terminus with a hexahistidine tag.
<b>Accession No.:</b>	QHD43416.1 (Uniprot)
<b>Tag:</b>	6 x His-Tag; C-terminal
<b>Host:</b>	Expressed in HEK293 Expi cells
<b>Applications:</b>	ELISA
<b>Purity:</b>	>90% (via analytical CGE under reducing conditions)
<b>Predicted Molecular Mass:</b>	~26 kDa (glycosylated form runs at 40 – 55 kDa in gel electrophoresis)  Peak 1: 0.2 kDa Peak 2: 4.5 kDa (Protein Ladder Marker) Peak 3: 5.5 kDa (System Peak) Peak 4: 6.1 kDa (System Peak) Peak 5: 6.8 kDa (System Peak) Peak 6: 48.5 kDa Peak 7: 240.0 kDa (Protein Ladder Marker)
<b>Formulation:</b>	Liquid, 20mM NaPP, 300mM NaCl pH 7.2
<b>Endotoxin:</b>	Endotoxin level is < 0.001 EU/µg purified protein (LAL test)
<b>Storage:</b>	2°C to 8°C

## Protein Activity:

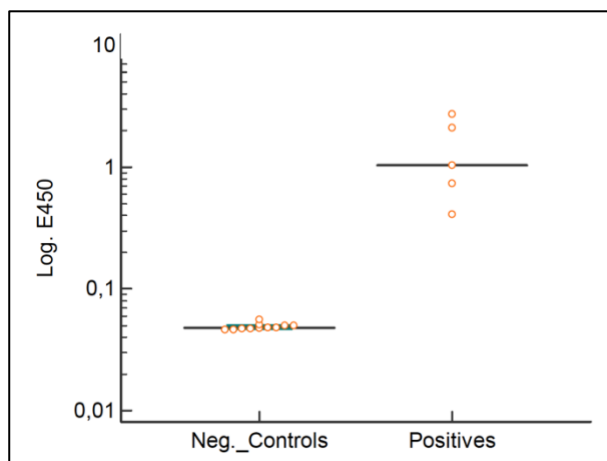


**Figure 1. SARS-CoV-2 IgG ELISA using BSV-COV-PR-48HEK as solid-phase bound capture antigen at 2 µg/mL in an in-house ELISA.**

5 SARS-CoV-2 positive patients tested by PCR vs 11 negative controls at 1:400 sample dilution.



**Figure 2. Titration curve of a SARS-CoV-2 antibody-positive patient serum sample and negative control serum on solid-phase bound RBD of SARS-CoV-2 spike glycoprotein.**



**Figure 3. SARS-CoV-2 IgG ELISA using BSV-COV-PR-48HEK as solid-phase bound capture antigen at 2 µg/mL, in combination with RBD-Biotin conjugate as soluble detector/tracer at 1 µg/mL in an in-house ELISA.**

5 SARS-CoV-2 positive patients tested by PCR vs 11 negative controls at 1:160 sample dilution.