

SARS-CoV-2 Spike Protein S1-Receptor-Binding Domain (S1-RBD), His-Tag (HEK)

Description:

InVivo offers a recombinant form of the spike glycoprotein receptor binding domain (RBD) from severe acute respiratory syndrome-related coronavirus (SARS-CoV-2), Wuhan-Hu-1-isolate (MN908947), which is produced under serum-free conditions in HEK-INV cells (InVivo proprietary optimized; human embryonic kidney, HEK293 cells).

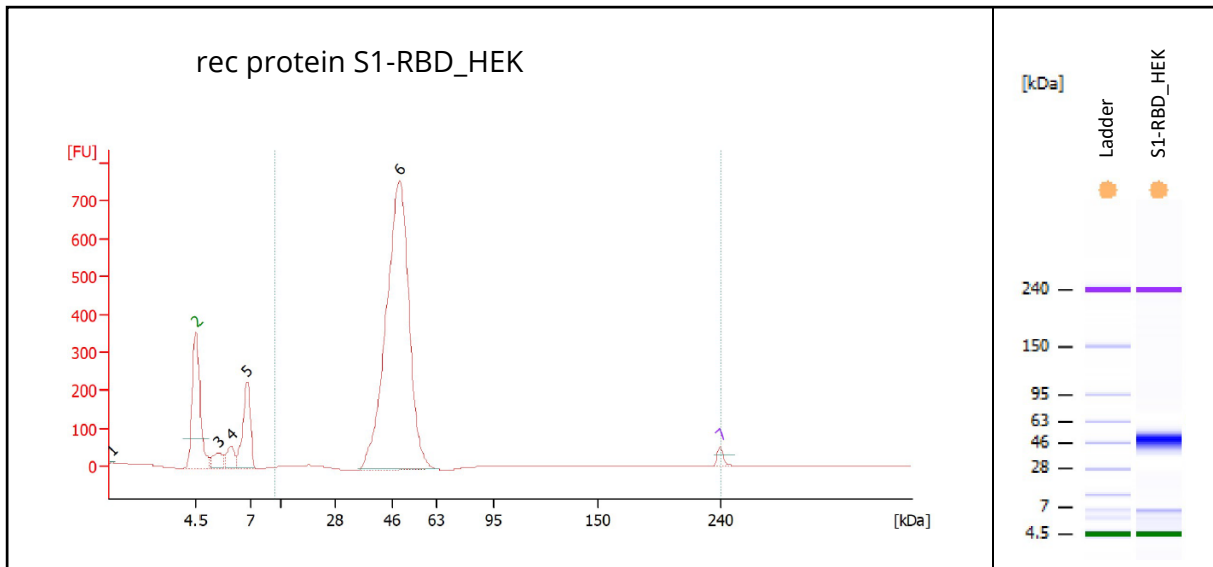
The construct contains 223 residues of the SARS-CoV-2 spike glycoprotein RBD, representing amino acid residues 319 to 541 of before mentioned annotation. The protein includes a C-terminal hexa-histidine tag and is purified using immobilized metal exchange chromatography (IMAC) and preparative SEC (for polishing).

Product-ID:	S1-RBD_HEK
Expression System:	Mammalian; HEK
Protein Accession Number:	QHD43416.1
Amino Acids:	319-541
Tag:	6 x His-Tag; C-terminal
Expected Molecular Weight:	26 kDa (<i>glycosylated form runs at 40-55 kDa in gel electrophoresis</i>)
Formulation:	Liquid, 20 mM NaPP, 300 mM NaCl pH 7.2
Concentration:	≥ 1 mg/ml
Purity:	≥ 90% (<i>via analytical CGE under reducing conditions</i>)
Aggregation Level:	< 10% (<i>via analytical SEC</i>)

The product is for research use or for further manufacturing only.

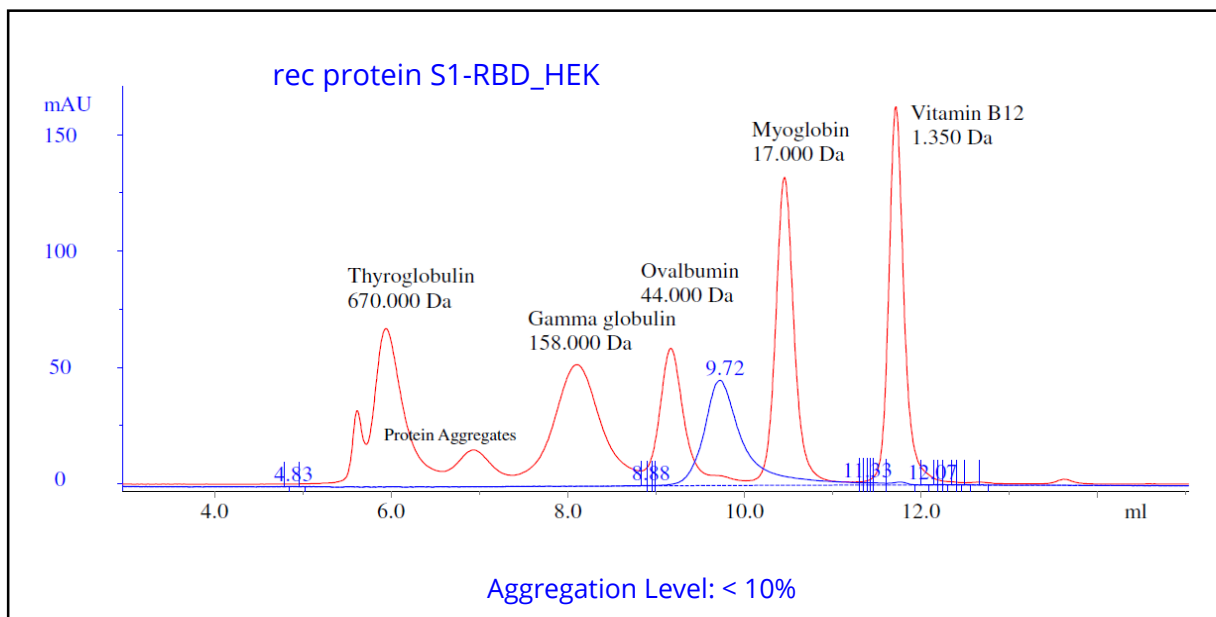
Purity (analytical CGE, under reducing conditions):

Please note: Glycosylated form of S1-RBD_HEK runs at 40-55 kDa in gel electrophoresis

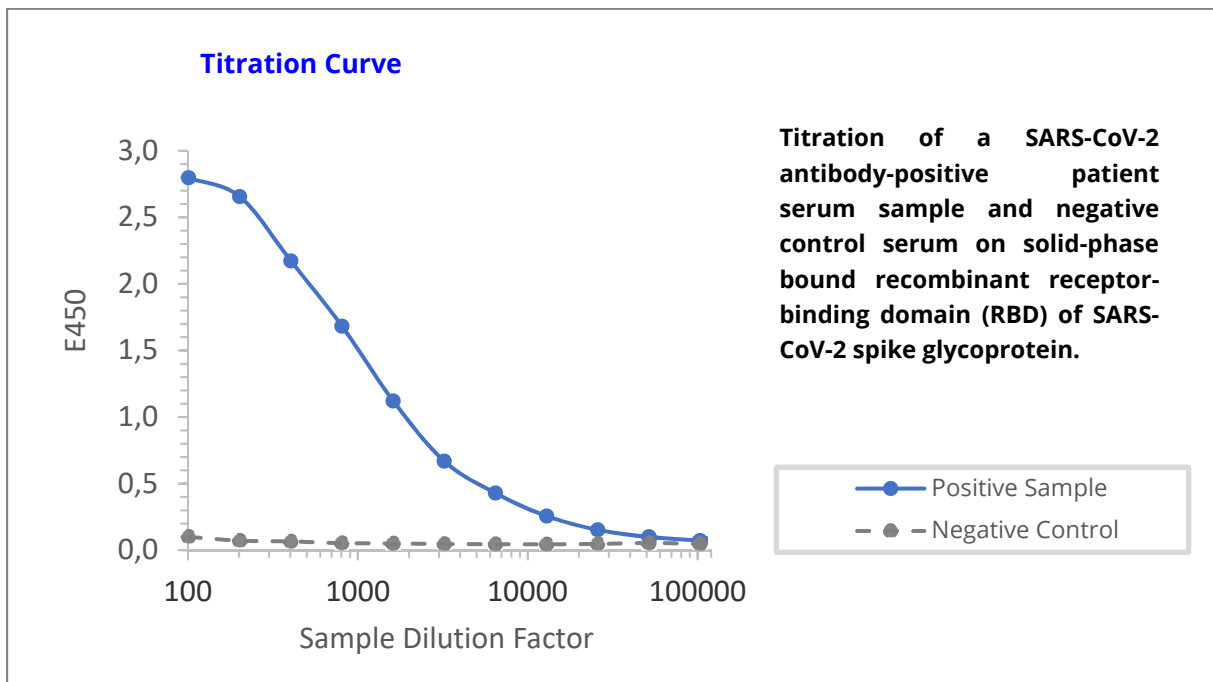
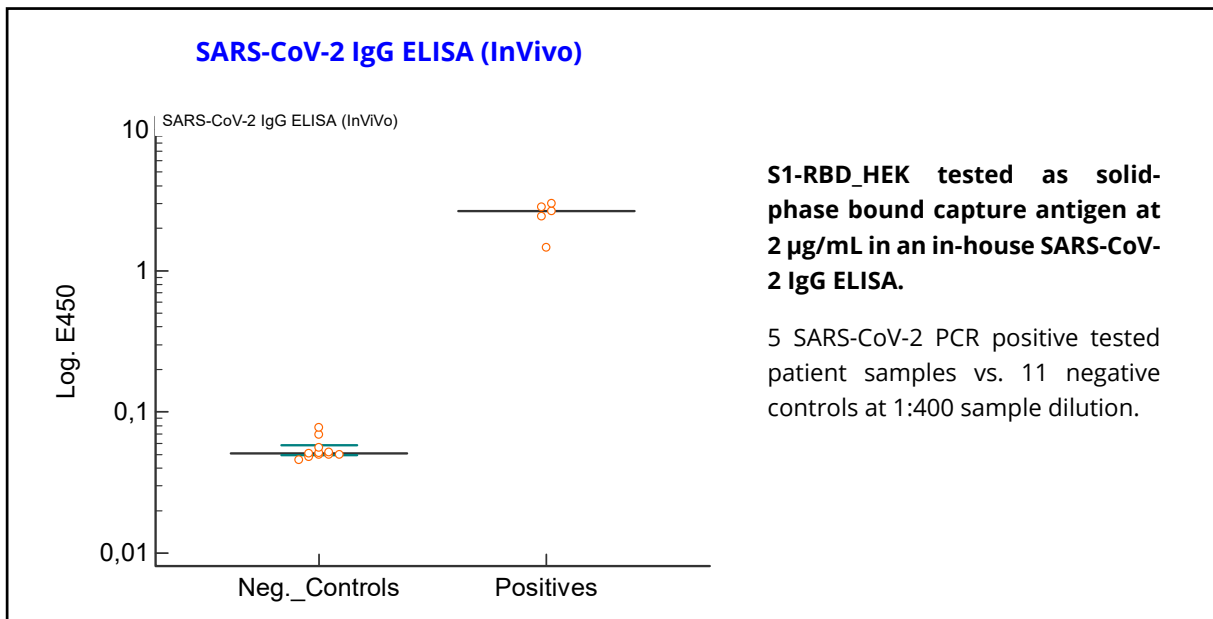


Peak	Size [kDa]	% of Total	Observations
1	0.2	0.0	
2	4.5	0.0	Lower Marker
3	5.5	0.0	System Peak
4	6.1	0.0	System Peak
5	6.8	0.0	System Peak
6	48.5	≥ 90%	
7	240.0	0.0	Upper Marker

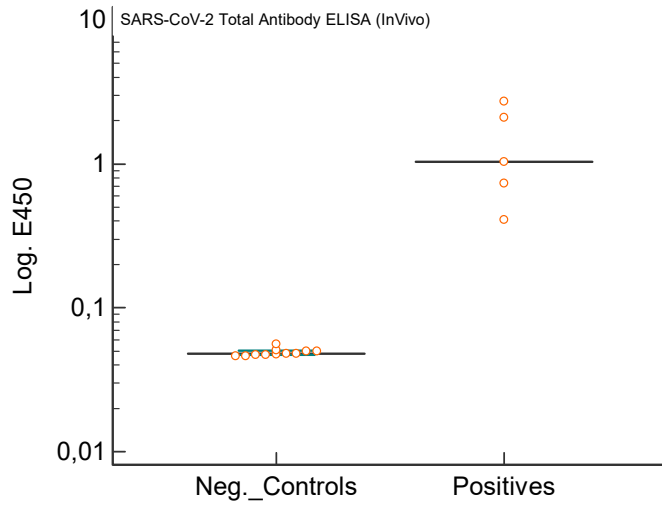
Aggregation Level (analytical SEC):



Protein Activity (ELISA):



SARS-CoV-2 Total Antibody ELISA (InVivo)



S1-RBD_HEK tested 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 SARS-CoV-2 Total Antibody ELISA.

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