

## **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).

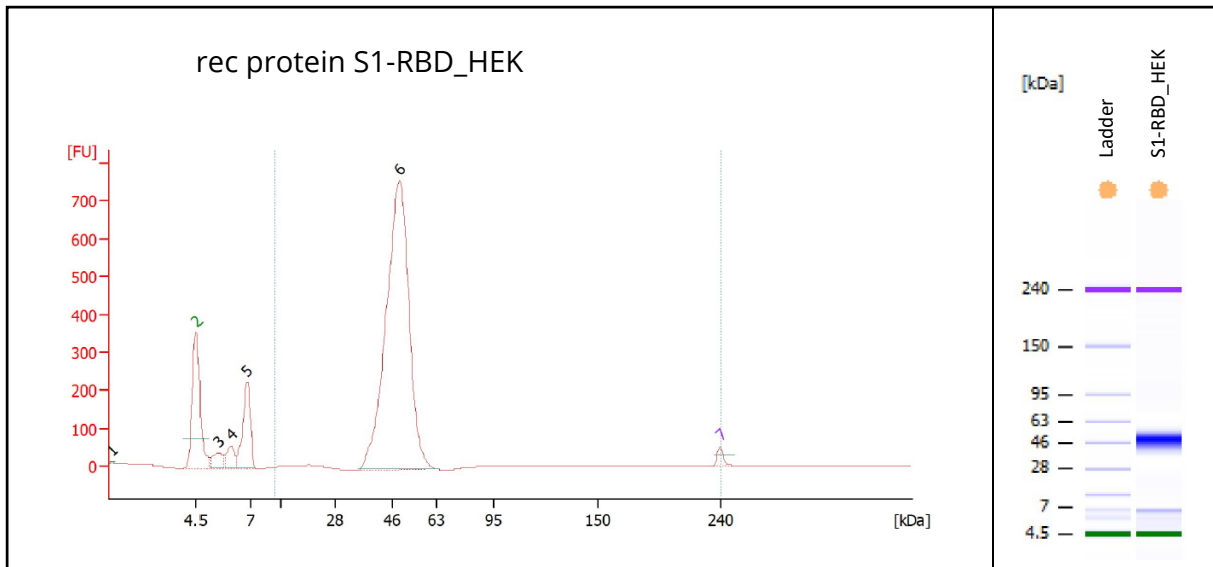
The construct contains 223 residues of the SARS-CoV-2 spike glycoprotein RBD, representing amino acid residues 319 to 541 of before mentioned annotation. The protein includes a C-terminal hexa-histidine tag and is purified using immobilized metal exchange chromatography (IMAC) and preparative SEC (for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

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

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

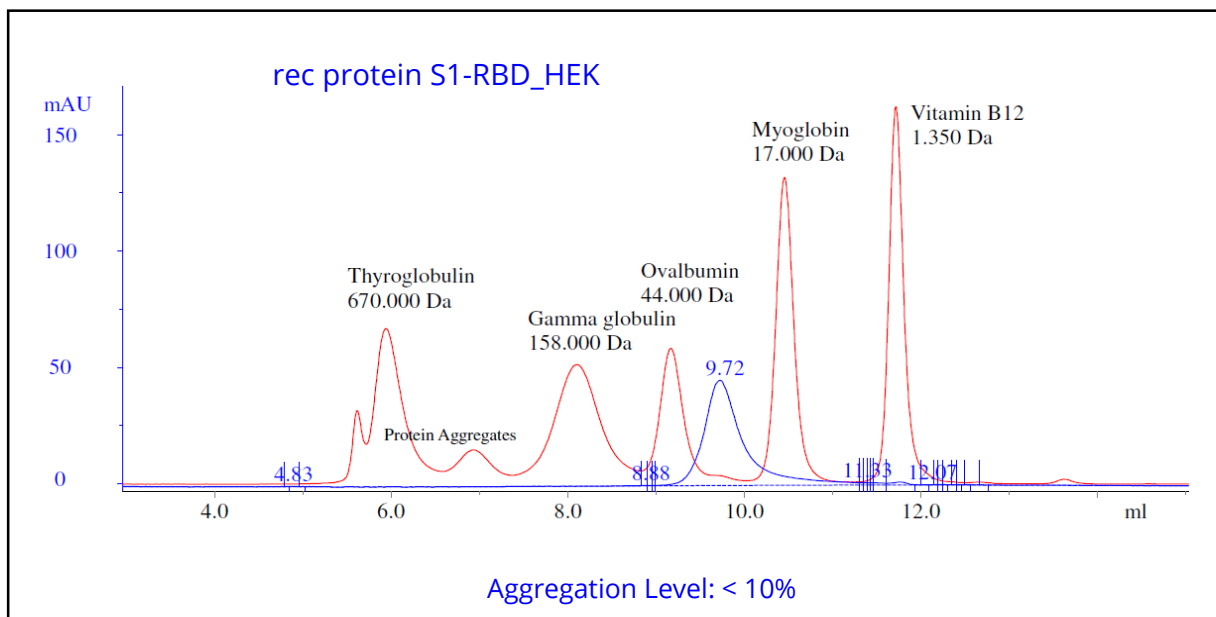
**Purity (analytical CGE, under reducing conditions):**

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

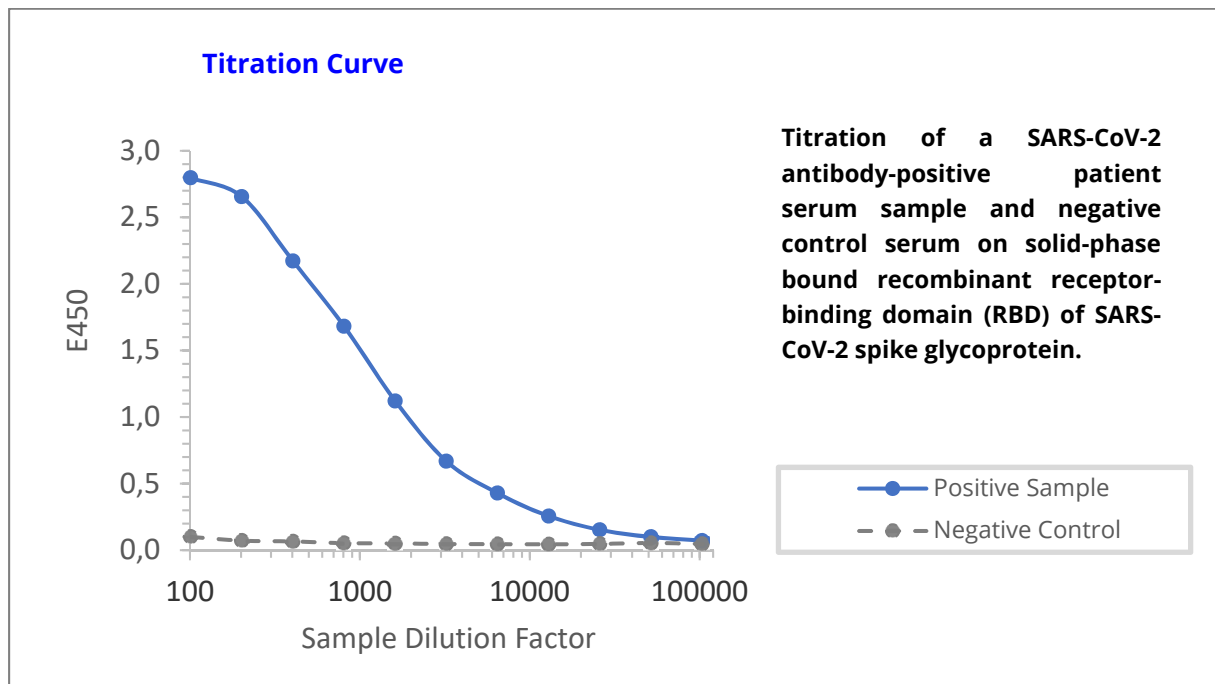
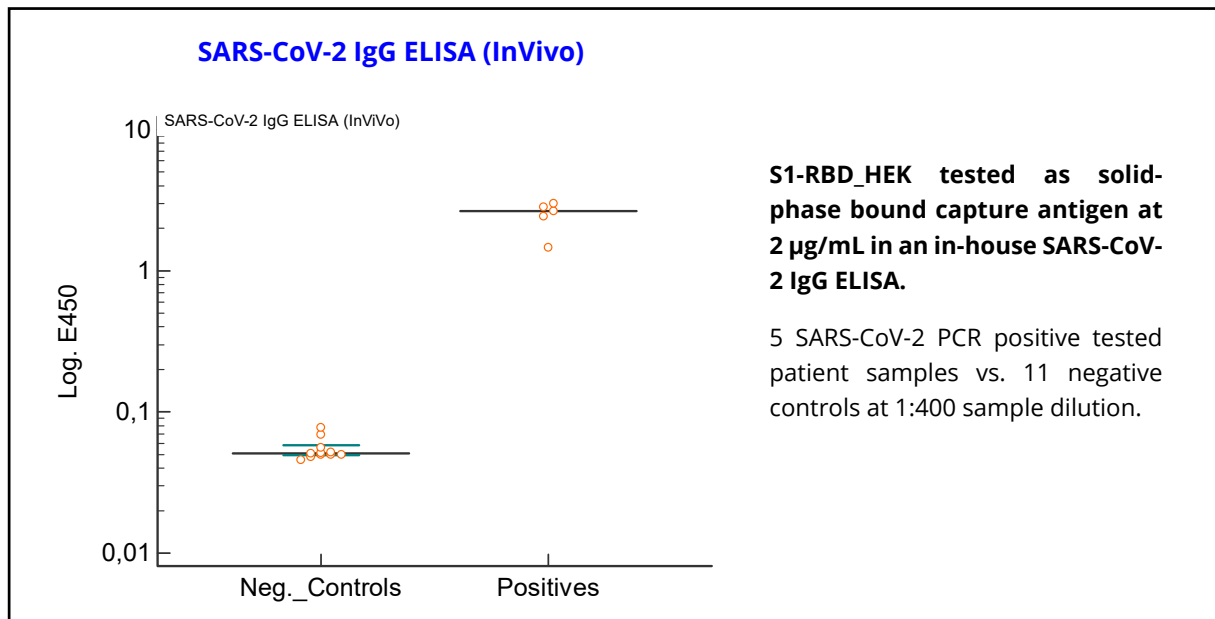


Peak	Size [kDa]	% of Total	Observations
1	0.2	0.0	
2	4.5	0.0	Lower Marker
3	5.5	0.0	System Peak
4	6.1	0.0	System Peak
5	6.8	0.0	System Peak
6	48.5	≥ 90%	
7	240.0	0.0	Upper Marker

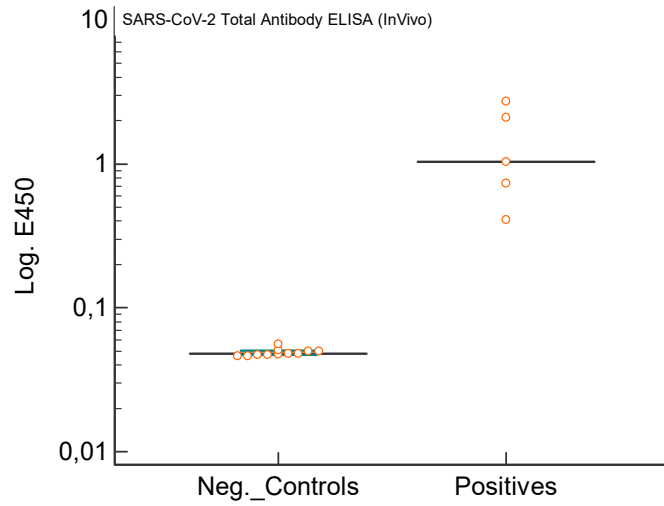
**Aggregation Level (analytical SEC):**



## 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.