

## Anti-Spike (RBD) Antibody\_AK3401

### Description:

InVivo offers a series of different monoclonal antibodies for the detection of the Spike protein from SARS-CoV-2. All antibodies come from hybridoma cell lines that were generated by immunization with the recombinant full-length Spike protein (S) or the receptor-binding domain (RBD).

This antibody has been validated by ELISA and is specifically directed against an epitope that is located on the RBD.

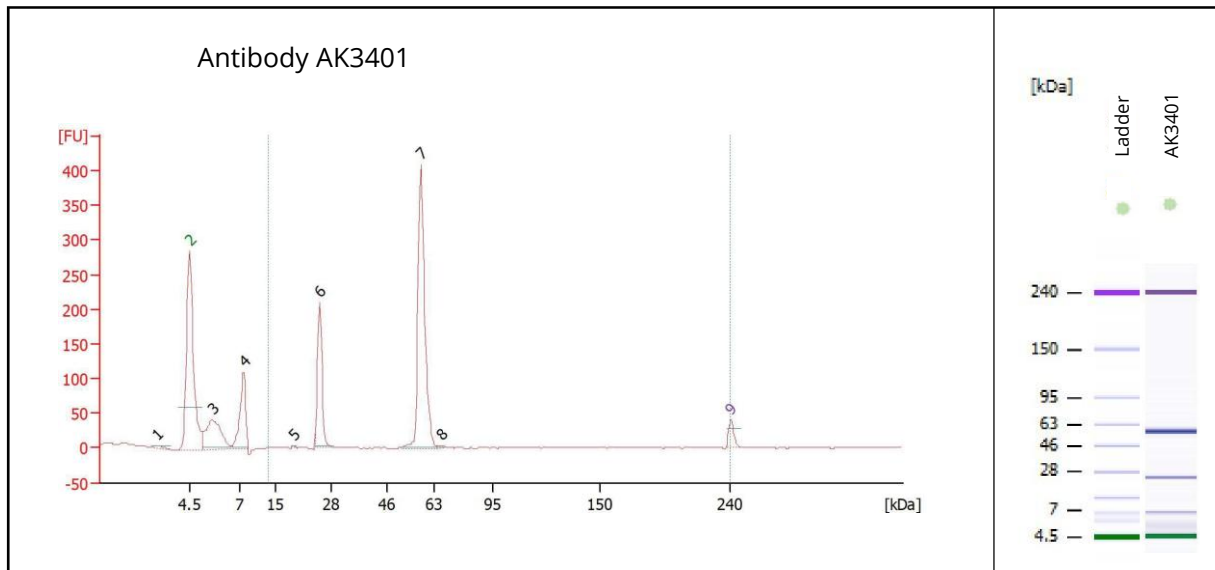
All antibodies are produced exclusively under serum-free conditions from hybridoma and purified through one-step purification with Protein-A affinity chromatography.

<b>Product-ID:</b>	AK3401
<b>Host:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Isotype:</b>	IgG
<b>Subclass:</b>	mIgG2bk
<b>Formulation:</b>	Liquid, PBS, pH 7.4, 0.2 µm sterile filtered
<b>Concentration:</b>	≥ 0.5 mg/ mL
<b>Purity:</b>	≥ 90% (via analytical CGE under reducing conditions)
<b>Conjugate:</b>	Unconjugated
<b>EC<sub>50</sub> RBD*:</b>	2.117 nM
<b>EC<sub>50</sub> S1*:</b>	1.117 nM
<b>EC<sub>50</sub> S*:</b>	0.424 nM

\*EC<sub>50</sub> values for 20 nM of coated antigen

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

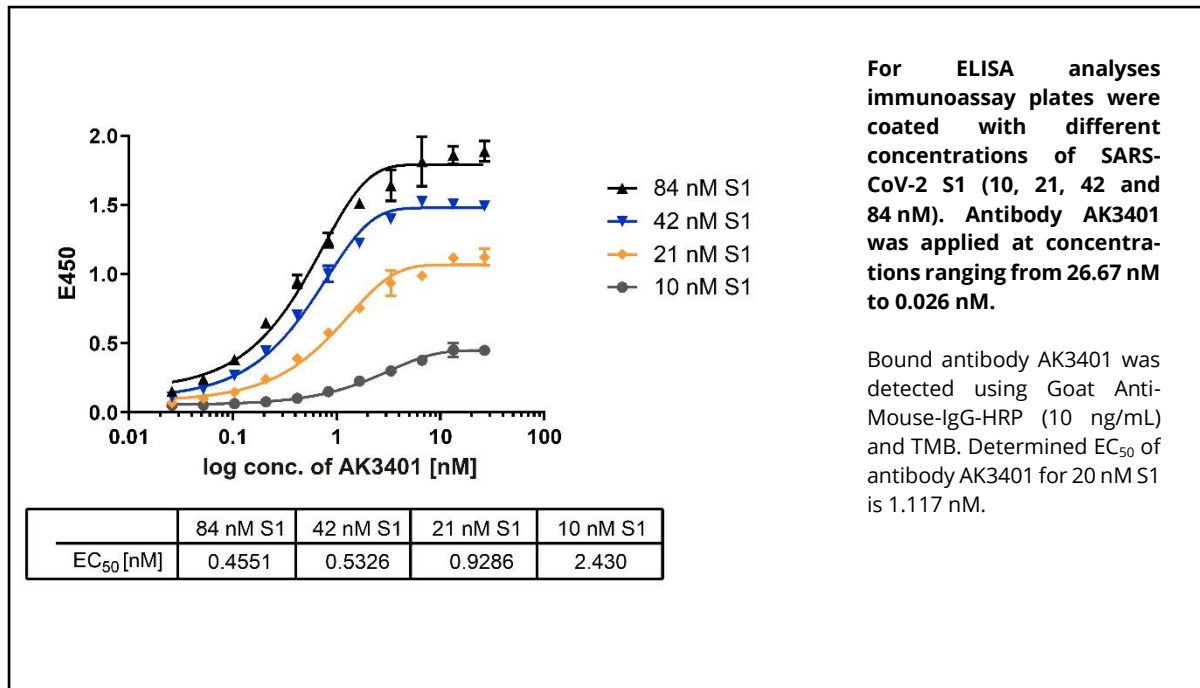
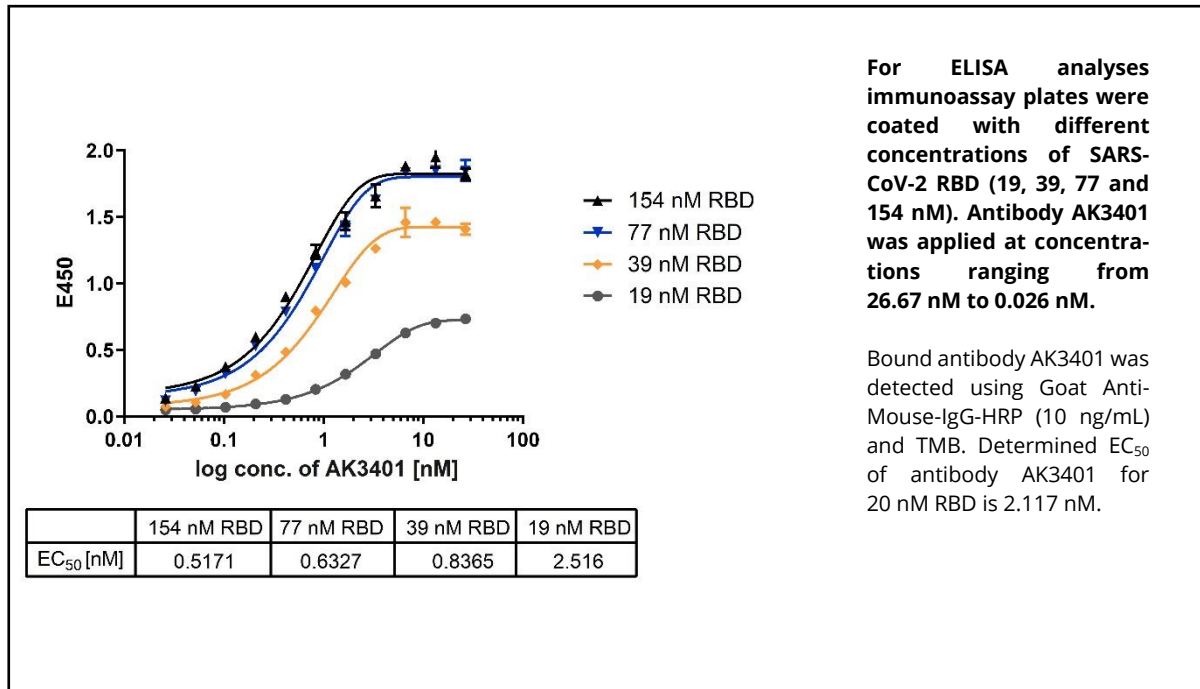
**Purity (analytical CGE, under reducing conditions):**

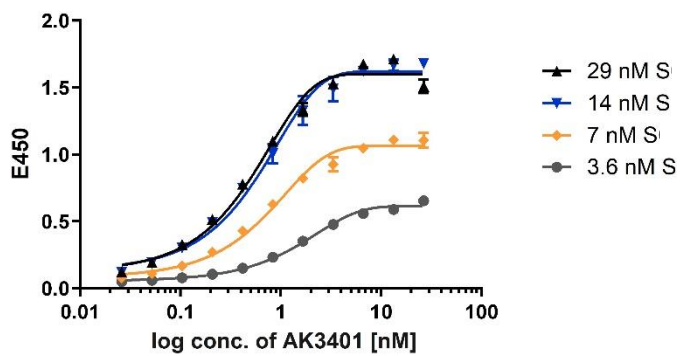


Peak	Size [kDa]	% of Total	Observations
1	2.9	0.0	
2	4.5	0.0	Lower Marker
3	5.6	0.0	System Peak
4	7.9	0.0	System Peak
5	19.3	0.3	
6	25.3	Peak Value 1	Light Chain
7	58.2	Peak Value 2	Heavy Chain
8	67.2	0.5	
9	240.0	0.0	Upper Marker

Summation of peak values 1 and 2 results in a purity of  $\geq 90\%$

**Protein Activity (ELISA):**





	29 nM S	14 nM S	7 nM S	3.6 nM S
EC <sub>50</sub> [nM]	0.5057	0.5967	0.7486	1.715

For ELISA analyses immunoassay plates were coated with different concentrations of SARS-CoV-2 Spike spike protein (3.6, 7, 14 and 29 nM). Antibody AK3401 was applied at concentrations ranging from 26.67 nM to 0.026 nM.

Bound antibody AK3401 was detected using Goat Anti-Mouse-IgG-HRP (10 ng/mL) and TMB. Determined EC<sub>50</sub> of antibody AK3401 for 20 nM Spike protein is 0.424 nM.