

PRODUCT INFORMATION

Anti-Spike (RBD) Antibody_AK3400

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.

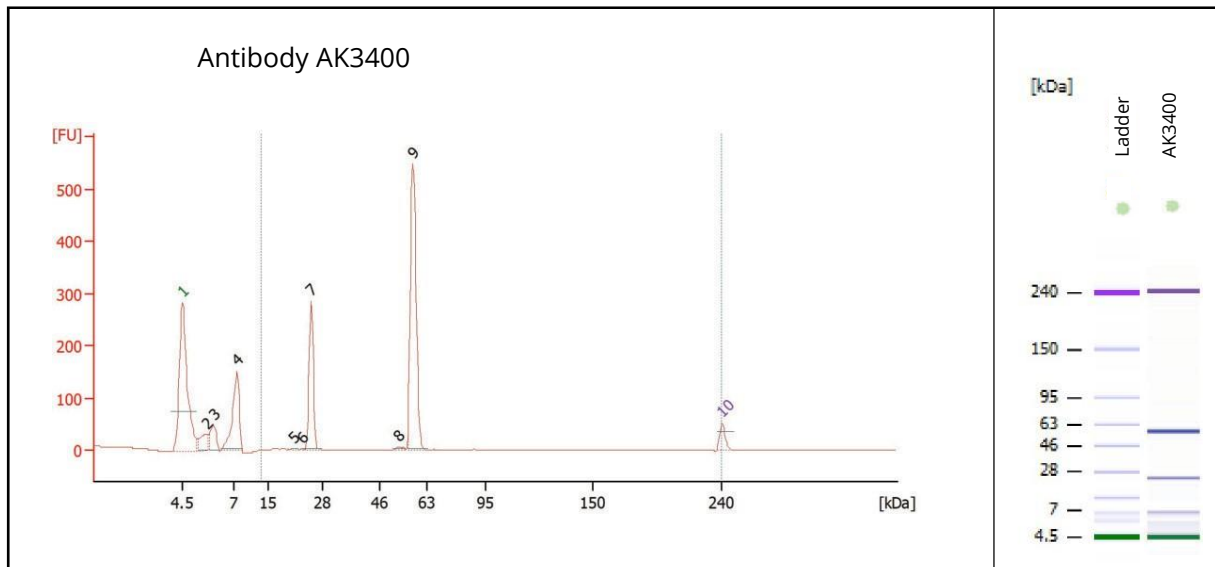
All antibodies are produced exclusively under serum-free conditions from hybridoma and purified through one-step purification with Protein-A affinity chromatography.

Product-ID:	AK3400
Host:	Mouse
Clonality:	Monoclonal
Isotype:	IgG
Subclass:	mIgG2bk
Formulation:	Liquid, PBS, pH 7.4, 0.2 µm sterile filtered
Concentration:	≥ 0.5 mg/ mL
Purity:	≥ 90% (via analytical CGE under reducing conditions)
Conjugate:	Unconjugated
EC₅₀ RBD*:	0.054 nM
EC₅₀ S1*:	1.159 nM
EC₅₀ S*:	0.374 nM

*EC₅₀ values for 20 nM of coated antigen

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

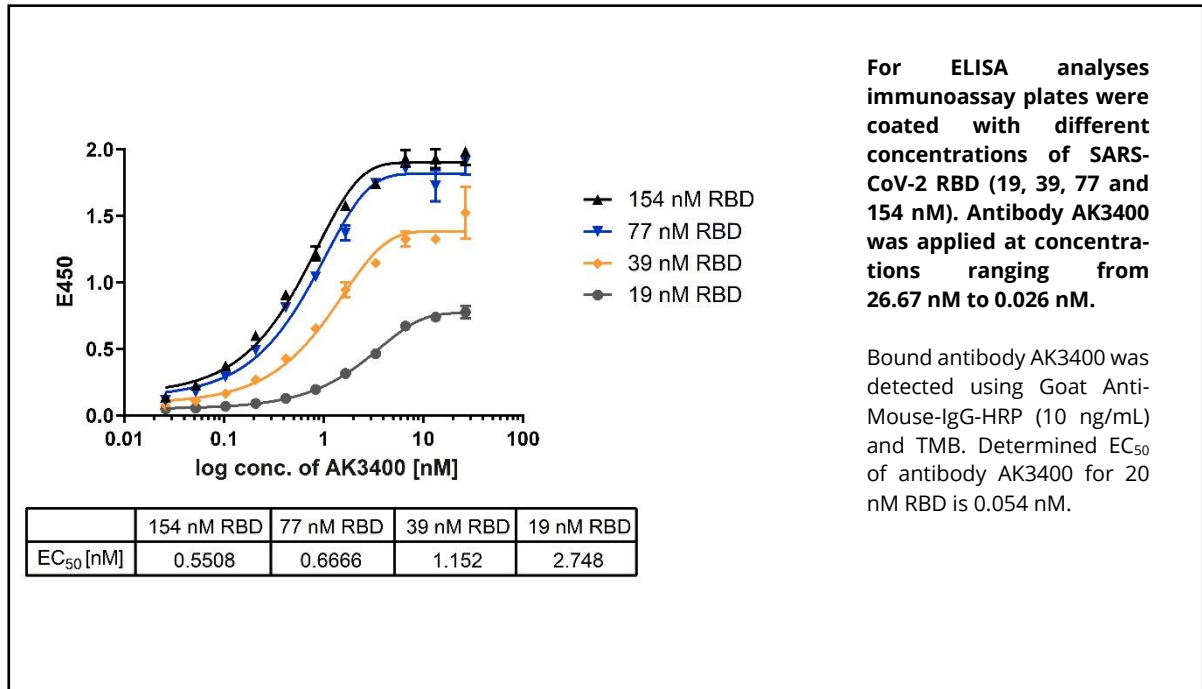
Purity (analytical CGE, under reducing conditions):



Peak	Size [kDa]	% of Total	Observations
1	4.5	0.0	Lower Marker
2	5.7	0.0	System Peak
3	6.0	0.0	System Peak
4	7.9	0.0	System Peak
5	21.0	0.4	
6	23.2	0.2	
7	25.3	Peak Value 1	Light Chain
8	52.9	0.9	
9	57.9	Peak Value 2	Heavy Chain
10	240.0	0.0	Upper Marker

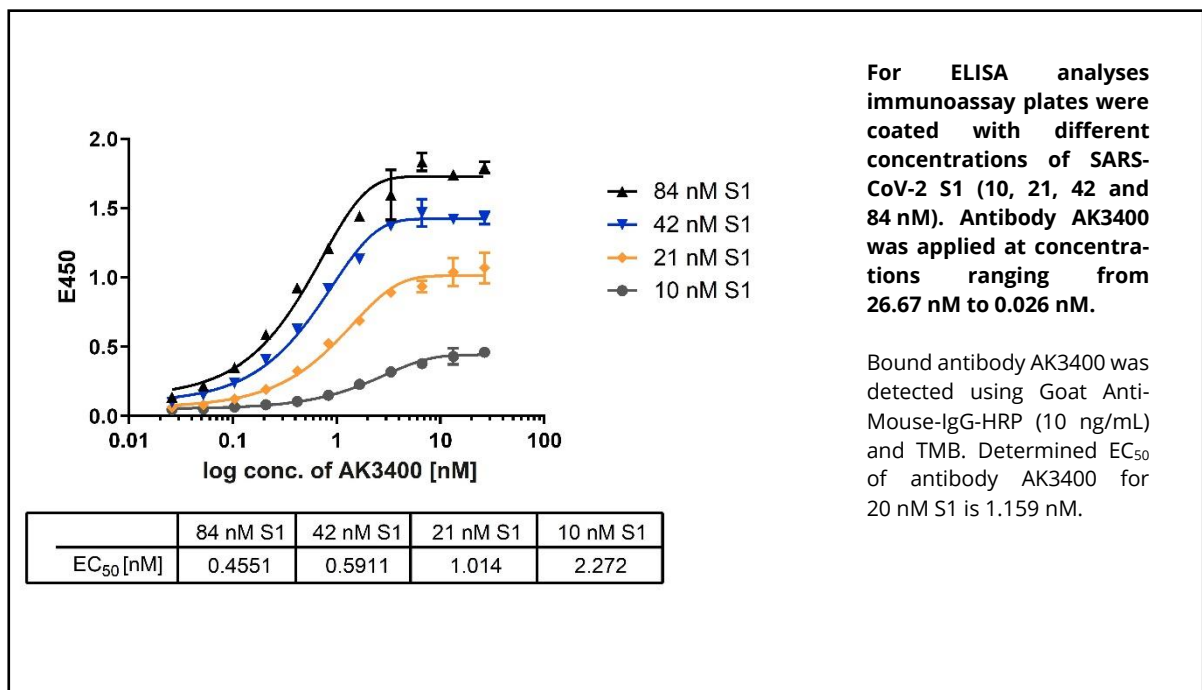
Summation of peak values 1 and 2 results in a purity of $\geq 90\%$

Protein Activity (ELISA):



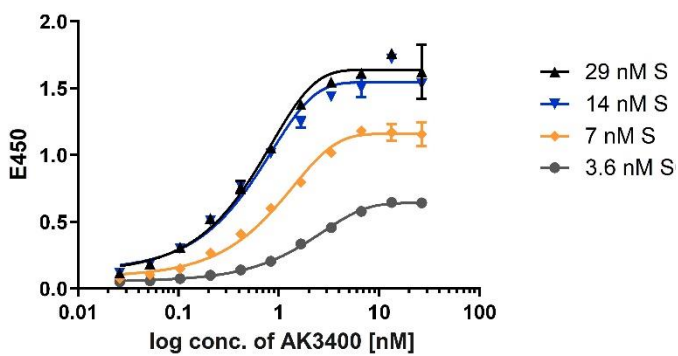
For ELISA analyses immunoassay plates were coated with different concentrations of SARS-CoV-2 RBD (19, 39, 77 and 154 nM). Antibody AK3400 was applied at concentrations ranging from 26.67 nM to 0.026 nM.

Bound antibody AK3400 was detected using Goat Anti-Mouse-IgG-HRP (10 ng/mL) and TMB. Determined EC₅₀ of antibody AK3400 for 20 nM RBD is 0.054 nM.



For ELISA analyses immunoassay plates were coated with different concentrations of SARS-CoV-2 S1 (10, 21, 42 and 84 nM). Antibody AK3400 was applied at concentrations ranging from 26.67 nM to 0.026 nM.

Bound antibody AK3400 was detected using Goat Anti-Mouse-IgG-HRP (10 ng/mL) and TMB. Determined EC₅₀ of antibody AK3400 for 20 nM S1 is 1.159 nM.



	29 nM S	14 nM S	7 nM S	3.6 nM S
EC ₅₀ [nM]	0.5491	0.5241	0.9229	1.992

For ELISA analyses immunoassay plates were coated with different concentrations of SARS-CoV-2 Spike protein (3.6, 7, 14 and 29 nM). Antibody AK3400 was applied at concentrations ranging from 26.67 nM to 0.026 nM.

Bound antibody AK3400 was detected using Goat Anti-Mouse-IgG-HRP (10 ng/mL) and TMB. Determined EC₅₀ of antibody AK3400 for 20 nM Spike protein is 0.374 nM.