

Anti-Spike (S1) Antibody_AK3424

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 within the S1-subunit but outside the RBD.

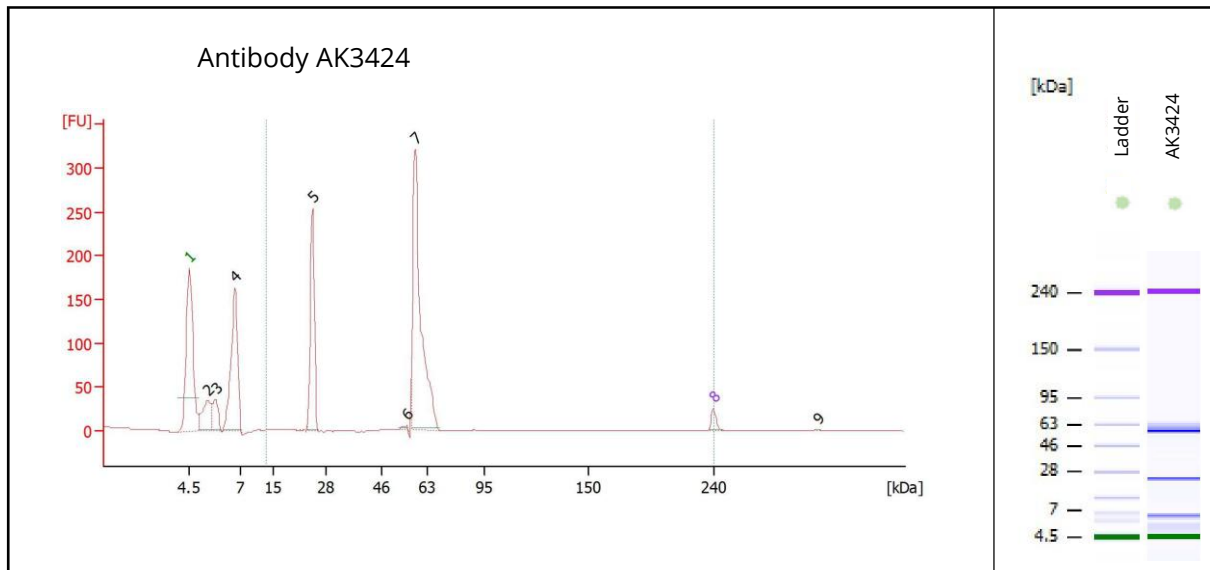
All antibodies are produced exclusively under serum-free conditions from hybridoma and purified through one-step purification with Protein-A affinity chromatography.

Product-ID:	AK3424
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 S1*:	1.211 nM
EC₅₀ S*:	0.226 nM

*EC₅₀ values for 20 nM of coated antigen

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

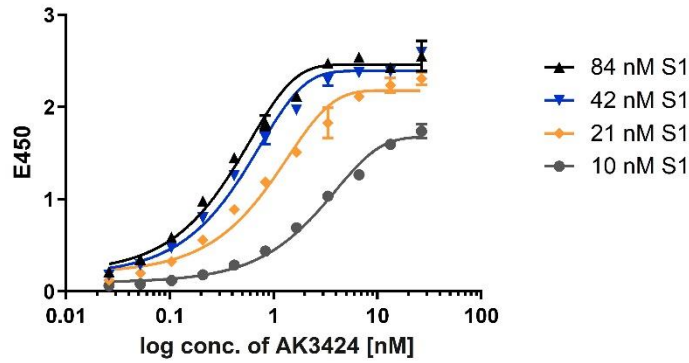
Purity (analytical CGE, under reducing conditions):



Peak	Size [kDa]	% of Total	Observations
1	4.5	0.0	Lower Marker
2	5.4	0.0	System Peak
3	5.8	0.0	System Peak
4	6.7	0.0	System Peak
5	24.6	Peak Value 1	Light Chain
6	55.3	0.6	
7	58.7	Peak Value 2	Heavy Chain
8	240.0	0.0	Upper Marker
9	314.6	0.0	

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

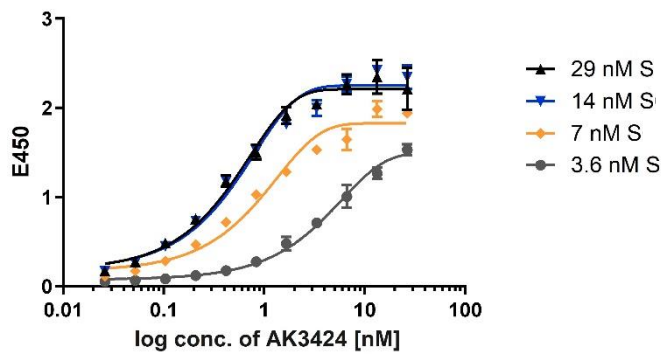
Protein Activity (ELISA):



	84 nM S1	42 nM S1	21 nM S1	10 nM S1
EC ₅₀ [nM]	0.3575	0.4635	0.8929	3.518

For ELISA analyses immunoassay plates were coated with different concentrations of SARS-CoV-2 S1 (10, 21, 42 and 84 nM). Antibody AK3424 was applied at concentrations ranging from 26.67 nM to 0.026 nM.

Bound antibody AK3424 was detected using Goat Anti-Mouse-IgG-HRP (10 ng/mL) and TMB. Determined EC₅₀ of antibody AK3424 for 20 nM S1 is 1.211 nM.



	29 nM S	14 nM S	7 nM S	3.6 nM S
EC ₅₀ [nM]	0.4559	0.4998	0.9475	6.452

For ELISA analyses immunoassay plates were coated with different concentrations of SARS-CoV-2 Spike protein (3.6, 7, 14 and 29 nM). Antibody AK3424 was applied at concentrations ranging from 26.67 nM to 0.026 nM.

Bound antibody AK3424 was detected using Goat Anti-Mouse-IgG-HRP (10 ng/mL) and TMB. Determined EC₅₀ of antibody AK3424 for 20 nM Spike protein is 0.226 nM.