

## Anti-Spike (RBD) Antibody\_AK3404

### Description:

InVivo offers a series of different monoclonal antibodies for the detection of the SARS-CoV-2 Spike protein. 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. Additionally, ELISAs with directly coated antigens proved that this antibody also binds to the Alpha variant of the Spike protein and different RBD variants (Alpha, Alpha + E484K, Beta and Gamma).

It is also recommended and independently tested for use in sandwich ELISA assays.

This antibody was shown to neutralize the SARS-CoV-2 wildtype (Wuhan), as well as the Alpha and the Beta variant in cell culture. No other variants were tested.

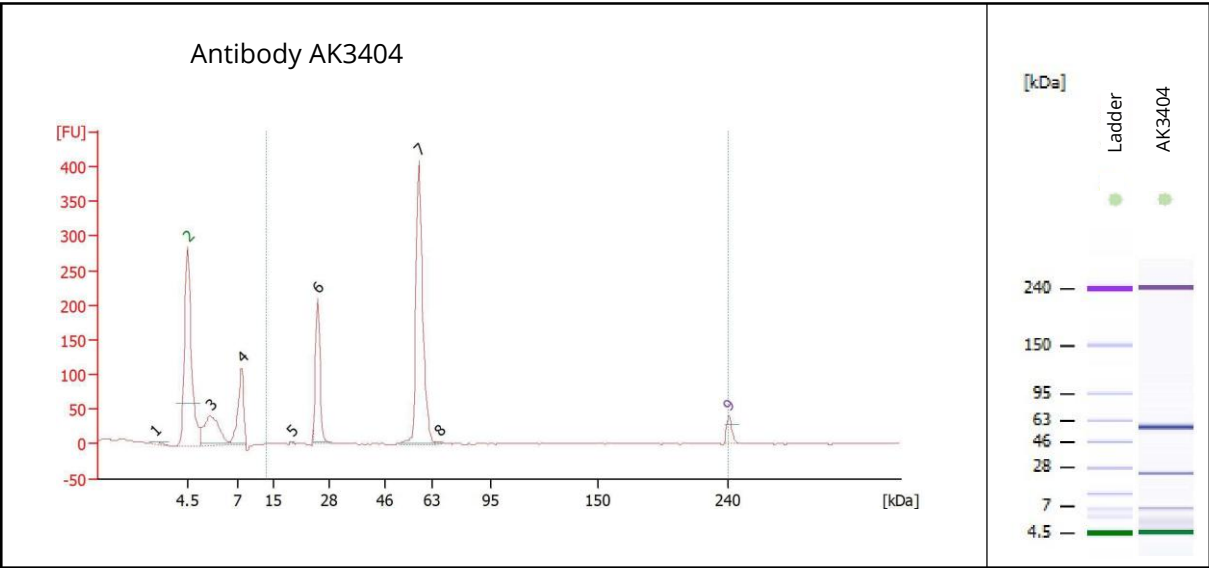
All antibodies are produced exclusively under serum-free conditions from hybridoma and purified through one-step purification with Protein-A affinity chromatography.

<b>Product-ID:</b>	AK3404
<b>Host:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Isotype:</b>	IgG
<b>Subclass:</b>	mIgG1κ
<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>Specificity:</b>	S (tested for: Wuhan and Alpha) RBD (tested for: Wuhan, Alpha, Alpha+E484K, Beta and Gamma)
<b>Neutralization:</b>	yes
<b>IC<sub>50</sub> SARS-CoV-2 Wuhan<sup>1</sup>:</b>	0.21 +/- 0.04 μg/ml
<b>IC<sub>50</sub> SARS-CoV-2 Alpha<sup>1</sup>:</b>	0.16 +/- 0.07 μg/ml
<b>IC<sub>50</sub> SARS-CoV-2 Beta<sup>1</sup>:</b>	0.21 +/- 0.10 μg/ml

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

<sup>1</sup> Mean of two individual in-cell neutralization assays performed with Vera6 cells by our cooperation partner Dr. Valeria Falcone from the University Hospital Freiburg (Institute of Virology)

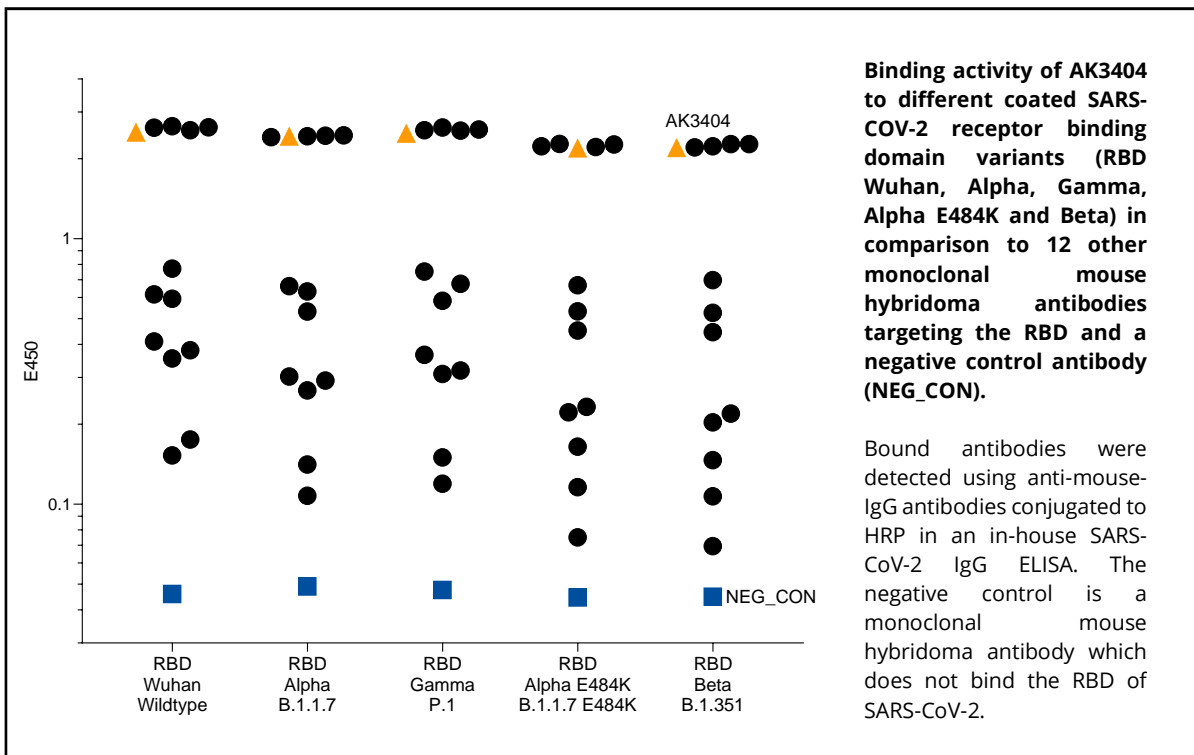
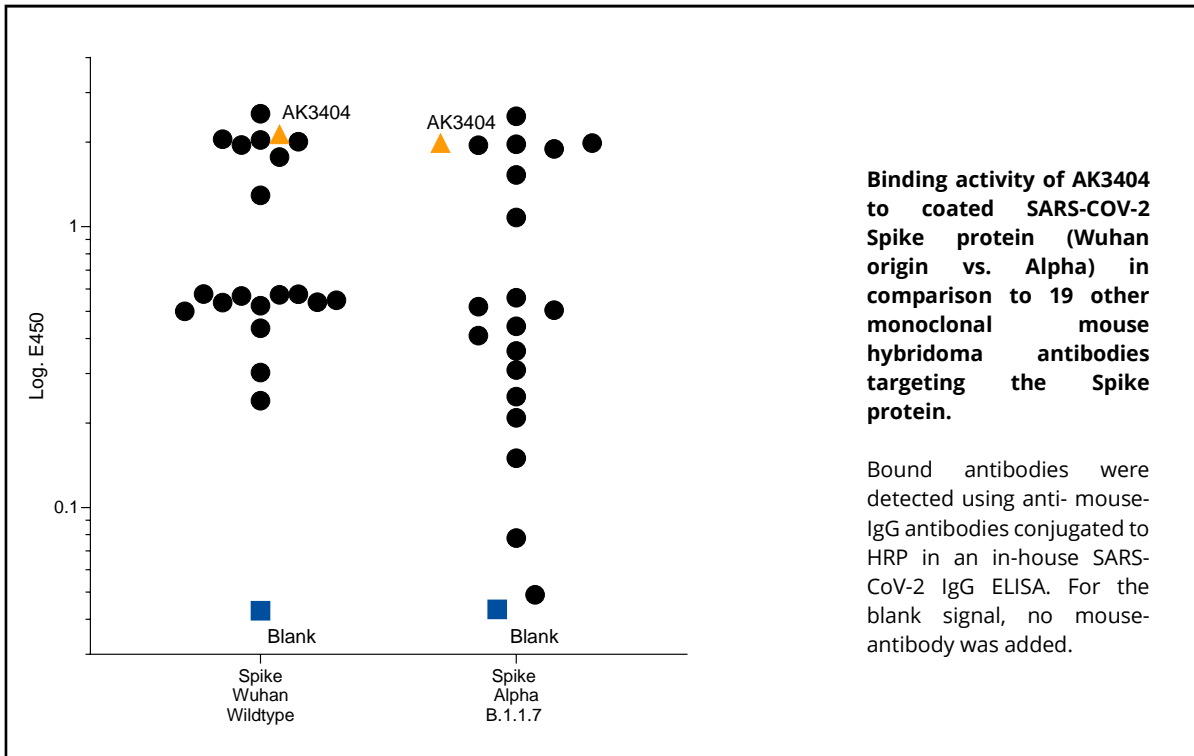
**Purity (analytical CGE, under reducing conditions):**



Peak	Size [kDa]	% of Total	Peak Identification
1	2.9	0.0	unknown
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	unknown
6	25.3	Peak Value 1	AK3404 Light Chain
7	58.2	Peak Value 2	AK3404 Heavy Chain
8	67.2	0.5	unknown
9	240.0	0.0	Upper Marker

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

**Binding activity to SARS-CoV-2 Spike protein and receptor-binding domain variants (ELISA):**



**Neutralization Assay:**

