InVivo BioTech Services GmbH
a BRUKER company

Anti-Spike (RBD) recombinant, chimeric Antibody_RP_SZ_824

Description:

InVivo offers a series of different monoclonal antibodies for the detection of the Spike protein from SARS-CoV-2. In addition to hybridoma cell antibodies, InVivo now offers **recombinant, chimeric antibodies, containing mouse variable domains (V_L+V_H) with human IgG1 (C_H) and kappa (C_L) constant domains.**
The variable sequences of RP_SZ_824 are identical to sequences of hybridoma cell line antibodies AK3399 and AK3401 (also available from InVivo), which were generated by **mouse immunization with the receptor-binding domain (RBD)** of the SARS-CoV-2 Spike protein.

This antibody has been validated by ELISA and is specifically directed against an epitope that is located on the receptor-binding domain (RBD).

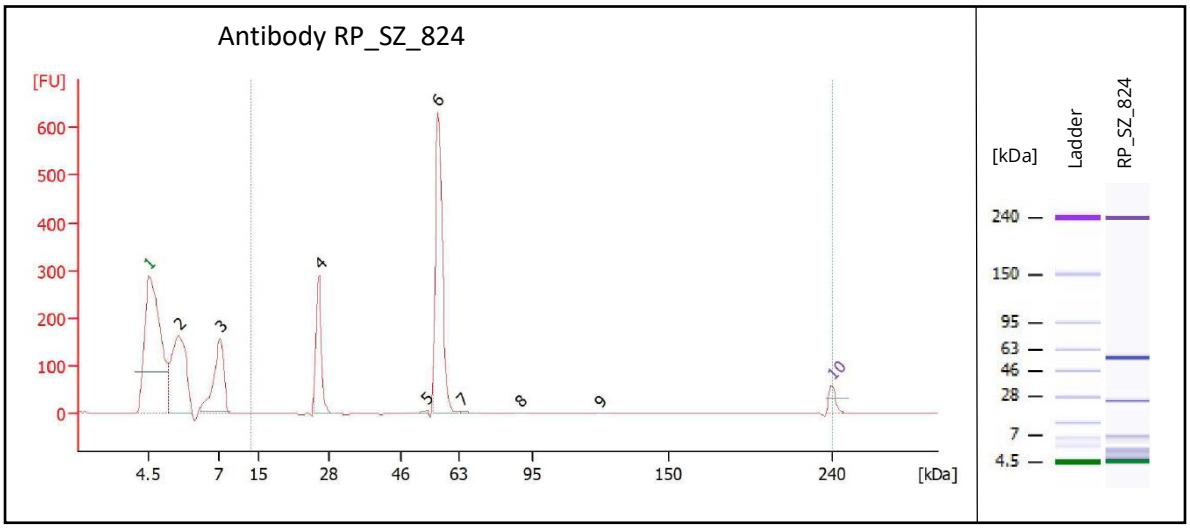
The recombinant antibodies are produced under serum-free conditions in HEK-INV cells (InVivo proprietary optimized; human embryonic kidney, HEK293 cells) and purified through one-step purification with Protein-A affinity chromatography.

Product-ID:	RP_SZ_824
Host:	Mammalian, HEK
Clonality:	Monoclonal
Isotype:	Human IgG
Subclass:	hIgG1κ
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
Binding units traceable to WHO Standard (20/136):	12575 +/- 1150 BAU/mg[1] (Spike Protein) resp. 32869 +/- 2219 BAU/mg[1] (RBD)

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

[1] BAU= binding antibody units. Determined using the first WHO International Standard for anti-SARS-CoV-2 immunoglobulin (20/136) on the directly coated, recombinant, wild-type form of the respective SARS-CoV-2 antigen in an in-house ELISA.

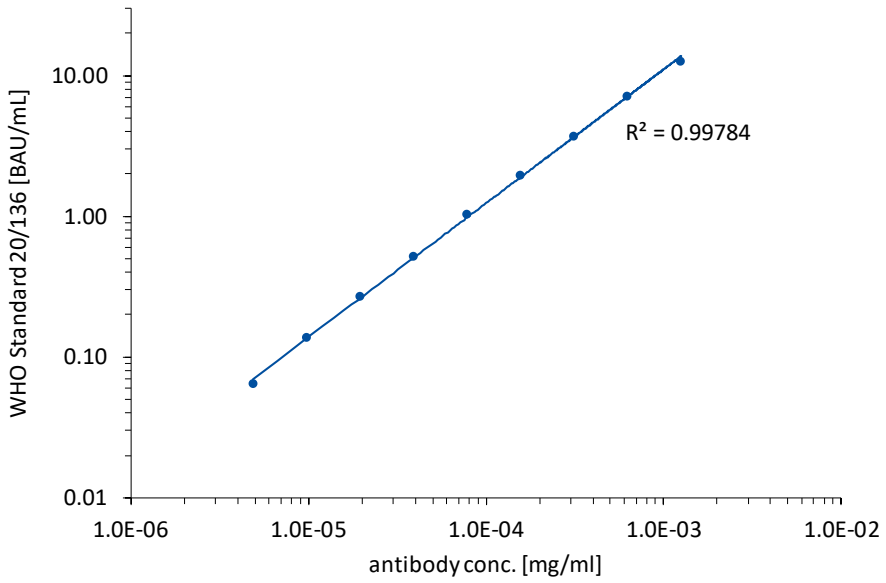
Purity (analytical CGE, under reducing conditions):



Peak	Size [kDa]	% of Total	Peak identification
1	4.5	0.0	Lower Marker
2	5.6	0.0	System Peak
3	7.5	0.0	System Peak
4	26.1	Peak Value 1	Light Chain RP_SZ_824
5	53.4	0.7	unknown
6	56.8	Peak Value 2	Heavy Chain RP_SZ_824
7	64.3	0.5	unknown
8	89.5	0.2	unknown
9	122.6	0.2	unknown
10	240.0	0.0	Upper Marker

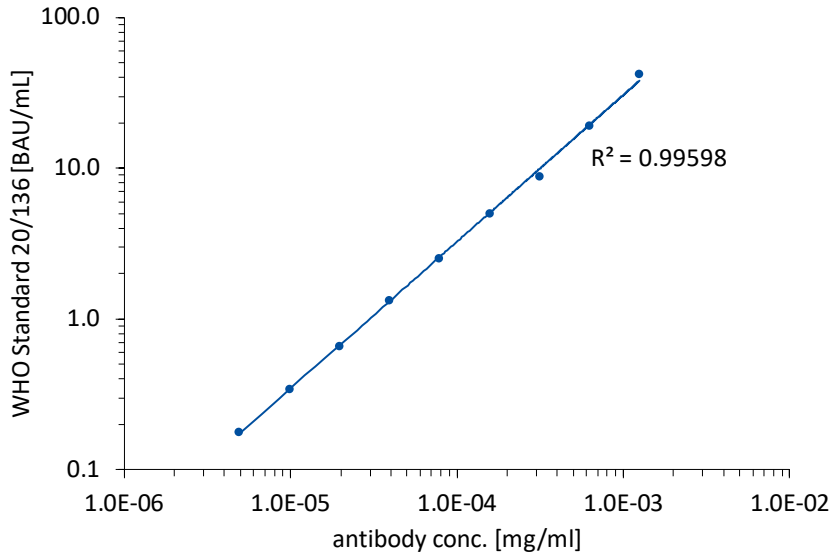
Summation of peak values 1 and 2 results in a purity of ≥ 90%

Calibration curves:



Calibration of the Anti-Spike (RBD) rec antibody RP_SZ_824 against the binding antibody units (BAU)/ml of the first WHO International Standard for anti-SARS-CoV-2 immunoglobulin (20/136).

Tested in an in-house ELISA on directly coated, recombinant, wild type-form of the SARS-CoV-2 **Spike Protein.**



Calibration of the Anti-Spike (RBD) rec antibody RP_SZ_824 against the binding antibody units (BAU)/ml of the first WHO International Standard for anti-SARS-CoV-2 immunoglobulin (20/136).

Tested in an in-house ELISA on directly coated, recombinant, wild type-form of the SARS-CoV-2 Spike Protein **receptor-binding domain (RBD)**.