Source

Anti-SARS-CoV-2 Spike Antibody, Mouse IgG1 (2C9C9) (XBB.1.5/Omicron Specific) is isolated from a Spike protein infected Mouse and is recombinantly produced from Hybridoma

Clone

2C9C9

Species

Mouse

Isotype

Mouse IgG1 | Mouse Kappa

Conjugate

Unconjugated

Antibody Type

Hybridoma Monoclonal

Reactivity

Virus

Immunogen

Recombinant SARS-CoV-2 Spike Trimer Protein (XBB.1.5/Omicron) erived from human 293 cells.

Specificity

This product is a specific antibody specifically reacts with SARS-CoV-2 Spike Trimer Protein, His Tag (XBB/Omicron) (MALS verified) (Cat. No. SPN-C5248), SARS-CoV-2 Spike Trimer Protein, His Tag (XBB.1/Omicron) (MALS verified) (Cat. No. SPN-C522t) and SARS-CoV-2 Spike Trimer Protein, His Tag (XBB.1.5/Omicron) (MALS verified) (Cat. No. SPN-C524i). No cross-reactivity is detected with Protein of WT (Cat. No. SPN-C52H9), Alpha (Cat. No. SPN-C52H6), Beta, Gamma (Cat. No. SPN-C52Hg), Delta (Cat. No. SPN-C52He), B.1.1.529/Omicron (Cat. No. SPN-C52Hz), BA.2/Omicron (Cat. No. SPN-C5223), BA.3/Omicron (Cat. No. SPN-C5225), BA.4/Omicron (Cat. No. SPN-C5229), BA.5/Omicron (Cat. No. SPN-C522e), BA.2.12.1/Omicron (Cat. No. SPN-C522d), BQ.1.1/Omicron (Cat. No. SPN-C522s), BA.2.75/Omicron (Cat. No. SPN-C522f), BA.4.6/Omicron (Cat. No. SPN-C522m), BF.7/Omicron (Cat. No. SPN-C522q).

Application

Application	Recommended Usage

Purity

>95% as determined by SDS-PAGE.

Purification

Protein A purified/ Protein G purified

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

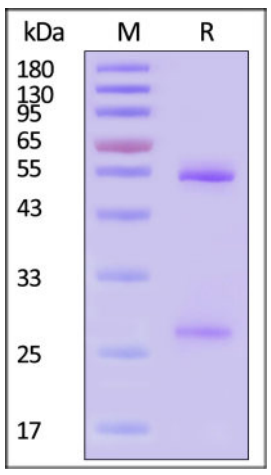
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

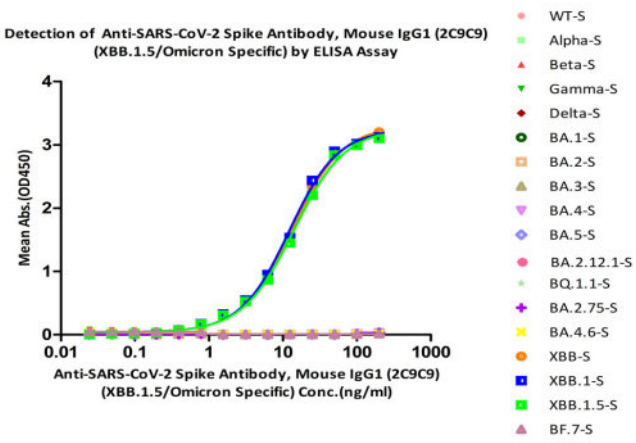
Application	Recommended Usage
ELISA	0.8-200 ng/mL

SDS-PAGE



Anti-SARS-CoV-2 Spike Antibody, Mouse IgG1 (2C9C9) (XBB.1.5/Omicron Specific) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized SARS-CoV-2 Spike Trimer Protein, His Tag (XBB/Omicron) (MALS verified) (Cat. No. SPN-C5248), SARS-CoV-2 Spike Trimer Protein, His Tag (XBB.1/Omicron) (MALS verified) (Cat. No. SPN-C522t) and SARS-CoV-2 Spike Trimer Protein, His Tag (XBB.1.5/Omicron) (MALS verified) (Cat. No. SPN-C524i) can bind Anti-SARS-CoV-2 Spike Antibody, Mouse IgG1 (2C9C9) (XBB.1.5/Omicron Specific) (Cat. No. SPN-Y169) with a linear range of 0.391-25 ng/mL (QC tested). The antibody does not bind Spike Protein of WT (Cat. No. SPN-C52H9), Alpha (Cat. No. SPN-C52H6), Beta, Gamma (Cat. No. SPN-C52Hg), Delta (Cat. No. SPN-C52He), B.1.1.529/Omicron (Cat. No. SPN-C52Hz), BA.2/Omicron (Cat. No. SPN-C5223), BA.3/Omicron (Cat. No. SPN-C5225), BA.4/Omicron (Cat. No. SPN-C5229), BA.5/Omicron (Cat. No. SPN-C522e), BA.2.12.1/Omicron (Cat. No. SPN-C522d), BQ.1.1/Omicron (Cat. No. SPN-C522s), BA.2.75/Omicron (Cat. No. SPN-C522f), BA.4.6/Omicron (Cat. No. SPN-C522m), BF.7/Omicron (Cat. No. SPN-C522q) (QC tested).

Background

It's been reported that SARS-CoV-2 can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion.The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Clinical and Translational Updates