

Source

Anti-SARS-CoV-2 Omicron Antibody-3A7C12 is a chimeric monoclonal antibody recombinantly expressed from HEK293 cells, which combines the variable region of a mouse monoclonal antibody with rabbit Fc constant domain. The mouse monoclonal antibody is produced from a hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from a mouse immunized with Spike RBD, SARS-CoV-2.

Clone

3A7C12

Species

Rabbit

Isotype

Rabbit IgG | Kappa

Conjugate

Unconjugated

Antibody Type

Recombinant Monoclonal

Reactivity

Virus

Immunogen

Recombinant SARS-CoV-2 Spike RBD Protein (B.1.1.529/Omicron) erived from human 293 cells.

Specificity

This product is a specific antibody specifically reacts with SARS-CoV-2 Spike RBD, His Tag (B.1.1.529/Omicron). No cross-reactivity is detected with WT (Cat. No. SPD-C52H1), Alpha (Cat. No. SPD-C52Hn), Beta (Cat. No. SPD-C52Hp), Gamma (Cat. No. SPD-C52Hr) and Delta (Cat. No. SPD-C52Hh).

Application

Application Recommended Usage

ELISA 0.4-100 ng/mL

Purity

>95% as determined by SDS-PAGE.

Purification

Protein A purified/ Protein G purified

Formulation

Lyophilized from $0.22~\mu m$ 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.

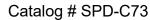
This product is stable after storage at:

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

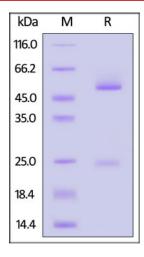
SDS-PAGE



Anti-SARS-CoV-2 Omicron Antibody-3A7C12, Rabbit IgG



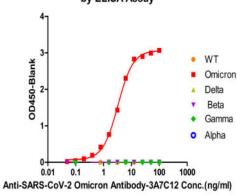




Anti-SARS-CoV-2 Omicron Antibody-3A7C12, Rabbit IgG on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA





Immobilized SARS-CoV-2 Spike RBD, His Tag (B.1.1.529/Omicron) (Cat. No. SPD-C522e) can bind Anti-SARS-CoV-2 Omicron Antibody-3A7C12, Rabbit IgG (Cat. No. SPD-C73) with a linear range of 0.39-6.25 ng/mL. The antibody does not bind WT (Cat. No. SPD-C52H1), Alpha (Cat. No. SPD-C52Hn), Beta (Cat. No. SPD-C52Hp), Gamma (Cat. No. SPD-C52Hr) and Delta (Cat. No. SPD-C52Hh) (QC tested).

Background

It's been reported that Coronavirus 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

