# Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (MALS verified)

Catalog # SPD-M334



#### Source

Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (SPD-M334) is a mouse monoclonal antibody recombinantly expressed from HEK293 cells. *The antibody is specific against the Beta* (B.1.351) and Gamma (P.1) variant of SARS-CoV-2, and has no binding with the spike RBD of the wild type virus, the Alpha (B.1.1.7) variant, the Delta (B.1.617.2) variant and the Omicron (B.1.1.529, BA.2) variant.

Clone

AM334

**Species** 

Mouse

Isotype

Mouse IgG1 | Mouse Kappa

**Antibody Type** 

Recombinant Monoclonal

Reactivity

Virus

#### Immunogen

Recombinant SARS-CoV-2 (COVID-19) S protein RBD (K417N, E484K, N501Y) erived from human 293 cells.

#### **Specificity**

This product is a specific antibody specifically reacts with SARS-CoV-2 (COVID-19) S protein RBD (K417N, E484K, N501Y) (Cat. No.SPD-C52Hp), Gamma (Cat. No. SPD-C52Hr), B.1.1.529/Omicron (Cat. No. SPD-C522e), BA.2/Omicron (Cat. No. SPD-C522g), BA.3/Omicron (Cat. No. SPD-C522i). No cross-reactivity is detected with Spike RBD of WT (Cat. No. SPD-C52H3), Alpha (Cat. No. SPD-C52Hn), Delta (Cat. No. SPD-C52Hh), BA.4&5Omicron (Cat. No. SPD-C522r), XBB/Omicron (Cat. No. SPD-C5241) and XBB.1.5/Omicron (Cat. No. SPD-C5242).

#### **Application**

**Application** Recommended Usage

ELISA 0.06-5000 ng/mL

#### **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Purification**

Protein A purified/ Protein G purified

#### Formulation

Supplied as 0.2 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### **Shipping**

This product is supplied and shipped with dry ice, please inquire the shipping cost.

#### Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE SEC-MALS

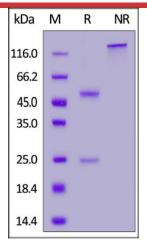


## Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (MALS verified)

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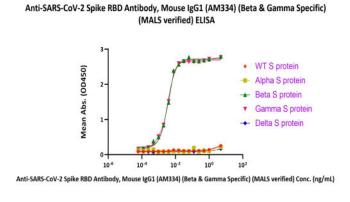


Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

(Beta & Gamma Specific) (Cat. No. SPD-M334) is more than 90% and the molecular weight of this protein is around 130-155 kDa verified by SEC-MALS.

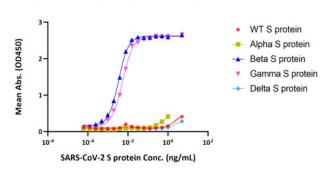


### **Bioactivity-ELISA**



Immobilized SARS-CoV-2 spike protein (Beta, Cat. No. SPN-C52Hk and Gamma, Cat. No. SPN-C52Hg) can bind Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (Cat. No. SPD-M334) with a linear range of 0.1-8 ng/mL. The antibody does not bind spike protein of WT (Cat. No. SPN-C52H7), Alpha (Cat. No. SPN-C52H6) and Delta (Cat. No. SPN-C52He) (QC tested).

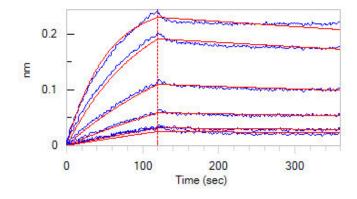
#### Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta &GammaSpecific) (MALS verified) ELISA



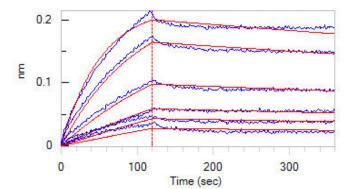
The purity of Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334)

Immobilized Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (Cat. No. SPD-M334) can bind SARS-CoV-2 spike protein (Beta, Cat. No. SPN-C52Hk and Gamma, Cat. No. SPN-C52Hg) with a linear range of 0.5-8 ng/mL. The antibody does not bind spike protein of WT (Cat. No. SPN-C52H7), Alpha (Cat. No. SPN-C52H6) and Delta (Cat. No. SPN-C52He) (Routinely tested).

### **Bioactivity-BLI**



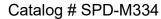
Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (Cat. No. SPD-M334) loaded on AMC Biosensor can bind SARS-CoV-2 S protein, His Tag (Beta, Cat. No. SPN-C52Hk) with an affinity constant of 11.1 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



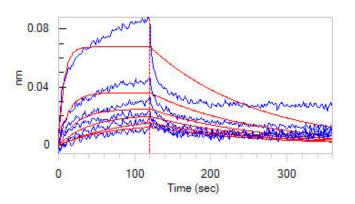
Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (Cat. No. SPD-M334) loaded on AMC Biosensor can bind SARS-CoV-2 S protein, His Tag (Gamma, Cat. No. SPN-C52Hg) with an affinity constant of 13.1 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



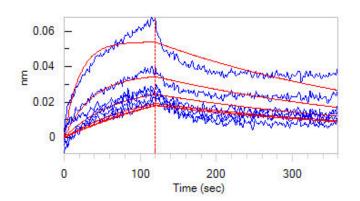
# Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (MALS verified)







Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (Cat. No. SPD-M334) loaded on AMC Biosensor does not bind SARS-CoV-2 S protein, His Tag (WT, Cat. No. SPN-C52H7) as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Anti-SARS-CoV-2 Spike RBD Antibody, Mouse IgG1 (AM334) (Beta & Gamma Specific) (Cat. No. SPD-M334) loaded on AMC Biosensor does not bind SARS-CoV-2 S protein, His Tag (Alpha, Cat. No. SPN-C52H6) as determined in BLI assay (ForteBio Octet Red96e) (Routinely 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**

