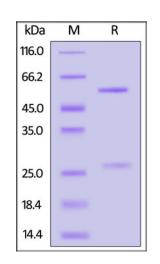


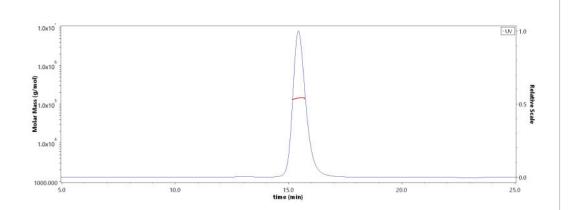
Catalog # SPD-M541

Source	Purity
Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) is isolated from a Spike RBD infected Mouse and is recombinantly produced from human 293 cells (HEK293) <b>Clone</b>	<ul><li>&gt;95% as determined by SDS-PAGE.</li><li>&gt;95% as determined by SEC-MALS.</li><li>Purification</li></ul>
10B1A5 Isotype	Protein A purified/ Protein G purified Formulation
Human IgG1   Human Kappa Conjugate	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant. Contact us for customized product form or formulation.
Unconjugated	Reconstitution
Antibody Type	Please see Certificate of Analysis for specific instructions.
Recombinant Monoclonal Reactivity	For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.
Virus	Storage
Immunogen	For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Recombinant SARS-CoV-2 Spike Trimer Protein (BA.4/Omicron) erived from human 293 cells.	Please avoid repeated freeze-thaw cycles.
Specificity	<ul> <li>This product is stable after storage at:</li> <li>-20°C to -70°C for 12 months in lyophilized state;</li> </ul>
This product is a specific antibody specifically reacts with Spike RBD.	• -70°C for 3 months under sterile conditions after reconstitution.
Application	
Application Recommended Usage	
ELISA 0.5-500 ng/mL	

#### **SDS-PAGE**



## **SEC-MALS**





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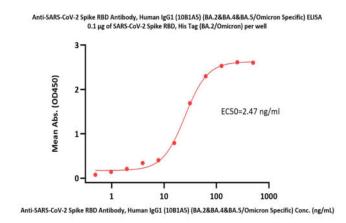
## Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (MALS verified)



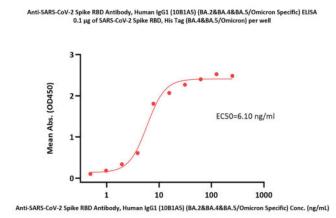
#### Catalog # SPD-M541

Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.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%.

### **Bioactivity-ELISA**

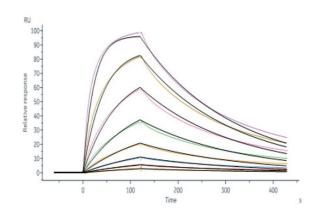


Immobilized SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) (Cat. No. SPD-C522g) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (Cat. No. SPD-M541) with a linear range of 0.5-63 ng/mL (QC tested).



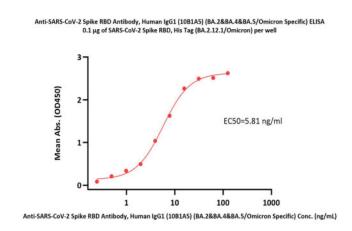
Immobilized SARS-CoV-2 Spike RBD, His Tag (BA.4&BA.5/Omicron) (Cat. No. SPD-C522r) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (Cat. No. SPD-M541) with a linear range of 0.5-16 ng/mL (QC tested).

#### **Bioactivity-SPR**

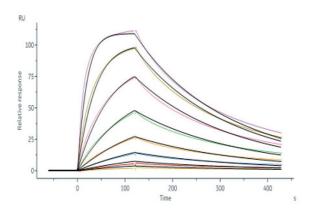


The purity of Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (Cat. No. SPD-M541) is more than 95% and the molecular weight of this protein is around 135-155 kDa verified by SEC-MALS.

<u>Report</u>



Immobilized SARS-CoV-2 Spike RBD, His Tag (BA.2.12.1/Omicron) (Cat. No. SPD-C522q) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (Cat. No. SPD-M541) with a linear range of 0.2-16 ng/mL (QC tested).





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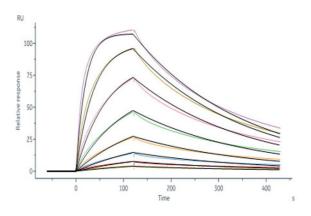
7/24/2024

# Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (MALS verified)



#### Catalog # SPD-M541

Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (Cat. No. SPD-M541) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind SARS-CoV-2 Spike RBD, His Tag (BA.4&BA.5/Omicron) (Cat. No. SPD-C522r) with an affinity constant of 15.5 nM as determined in a SPR assay (Biacore 8K) (Routinely tested). Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (Cat. No. SPD-M541) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind SARS-CoV-2 Spike RBD, His Tag (BA.2.12.1/Omicron) (Cat. No. SPD-C522q) with an affinity constant of 11.9 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).



Anti-SARS-CoV-2 Spike RBD Antibody, Human IgG1 (10B1A5) (BA.2&BA.4&BA.5/Omicron Specific) (Cat. No. SPD-M541) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind SARS-CoV-2 Spike RBD, His Tag (BA.2/Omicron) (Cat. No. SPD-C522g) with an affinity constant of 11.1 nM as determined in a SPR assay (Biacore 8K) (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**



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