Catalog # SPD-M121



Source		Purity		
Anti-SARS-CoV-2 Spike NTD Antibody, Chimeric mAb, Human IgG1 (AM121) (SPD-M121) is a chimeric monoclonal antibody combining the		>95% as determined by SDS-PAGE.		
constant domains of the human IgG1 molecule		Purification		
Clone		Protein A purified/ Protein G purified		
AM121		Formulation		
Isotype		Lyophilized from 0.22 $\mu$ m filtered solution in PBS, pH7.4 with trehalose as		
Human IgG1   Human Kappa <b>Conjugate</b>		protectant.		
		Contact us for customized product form or formulation.		
		Reconstitution		
Unconjugated Reactivity Virus		Please see Certificate of Analysis for specific instructions.		
		For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.		
Specificity		Storage		
This product is a specific antibody against SARS-CoV-2 S1 protein NTD.		For long term storage, the product should be stored at lyophilized state at -20°C		
Application		or lower.		
		Please avoid repeated freeze-thaw cycles.		
Application Recommended Usag	ye	This product is stable after storage at:		
ELISA 0.2-10 ng/mL		• -20°C to -70°C for 12 months in lyophilized state;		
		• -70°C for 3 months under sterile conditions after reconstitution.		

# **SDS-PAGE**

kDa	М	R	NR
116.0			
66.2	-	_	
45.0	-		
35.0	-		
25.0	-		
18.4			
14.4	-		

Anti-SARS-CoV-2 Spike NTD Antibody, Chimeric mAb, Human IgG1 (AM121) 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%.

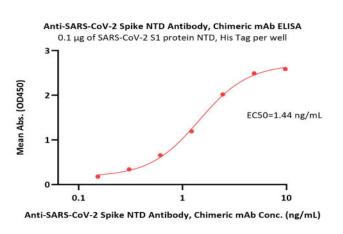
**Bioactivity-ELISA** 





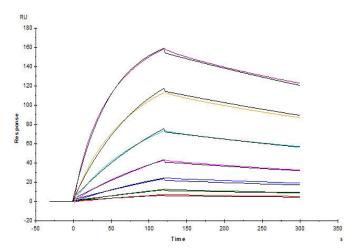


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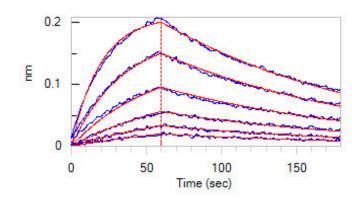
Immobilized SARS-CoV-2 S1 protein NTD, His Tag (Cat. No. S1D-C52H6) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-SARS-CoV-2 Spike NTD Antibody, Chimeric mAb, Human IgG1 (AM121) (Cat. No. SPD-M121) with a linear range of 0.2-2 ng/mL (QC tested).

## **Bioactivity-SPR**



Anti-SARS-CoV-2 Spike NTD Antibody, Chimeric mAb, Human IgG1 (AM121) (Cat. No. SPD-M121) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind SARS-CoV-2 S1 protein NTD, His Tag (Cat. No. S1D-C52H6) with an affinity constant of 74.6 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

## **Bioactivity-BLI**



Loaded Anti-SARS-CoV-2 Spike NTD Antibody, Chimeric mAb, Human IgG1 (AM121) (Cat. No. SPD-M121) on AHC Biosensor, can bind SARS-CoV-2 S1 protein NTD, His Tag (Cat. No. S1D-C52H6) with an affinity constant of 39.8 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



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#### 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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