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Human Anti-SARS-CoV-2 Spike-NTD (4A8) Neutralizing mAb

Catalog No.	CPC514B CPC514C	Quantity:	100 µg 1.0 mg
Alternate Names:	Spike glycoprotein, S glycoprotein N-terminal domain, S-NTD, 4A8		
Description:	<p>Recombinant Human anti-SARS-CoV-2 Spike Protein N-terminal domain, Clone 4A8, is expressed in CHO cell line. Originally 4A8 was a human isolate monoclonal antibody that targets the N-terminal domain (NTD) of the SARS-CoV-2 S protein and exhibits high neutralization potency against SARS-CoV-2 although it does not directly inhibit the interaction between RBD and ACE2.</p> <p>Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped, positive-sense, single-stranded RNA virus that causes coronavirus disease 2019 (COVID-19). The structural proteins of SARS-CoV-2 include the envelope protein (E), spike or surface glycoprotein (S), membrane protein (M) and the nucleocapsid protein (N). Spike glycoprotein is cleaved into the following 3 chains, Spike protein S1, Spike protein S2, Spike protein S2'. Spike protein S1 attaches the virion to the cell membrane by interacting with host receptor, initiating the infection. Binding to human ACE2 receptor and internalization of the virus into the endosomes of the host cell induces conformational changes in the Spike glycoprotein. Surface glycoprotein is an important target for vaccine development, antibody therapies and diagnostic antigen-based tests.</p>		
UniProt ID:	P0DTC2		
Specificity:	SARS-CoV-2 (2019-nCoV) Spike-NTD protein		
Source:	CHO cell line		
Isotype:	Human IgG1		
Clone:	4A8		
Concentration:	1.0 mg/ml, lot specific		
Formulation:	Sterile-filtered 100 mM Pro-Ac, 20 mM Arg, pH 5.0 Note formulation change.		
Purification:	Protein A/G affinity chromatography from cell culture supernatant		
Applications:	Neutralizing ELISA: suggested dilution 1:5,000 - 1:10,000 Western blot: suggested dilution 1:1,000 - 1:2,000		
Application Notes:	EC ₅₀ = 101.5 ng/ml, clone 4A8 binds with Spike-NTD by indirect ELISA		
Storage & Stability:	Stable at 2-8°C for 1 week or for up to 1 year at -20°C to -80°C. It is recommended to prepare working aliquots of undiluted product and store -20°C to -80°C.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

