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Human Anti-SARS-CoV-2 Spike-RBD (002-S21F2) Broad-Neutralizing mAb

Catalog No.	CPC542C	Quantity:	1.0 mg
Alternate Names:	Spike glycoprotein, Spike receptor binding domain, Spike-RB protein, S2E12		
Description:	<p>Recombinant Human anti-SARS-CoV-2 Spike-RBD (002-S21F2) is expressed in XtenCHO. This receptor-binding domain (RBD) targeting human antibody (002-S21F2) effectively neutralizes live viral isolates of SARS-CoV-2 variants of concern (VOCs) including Alpha, Beta, Gamma, Delta, and Omicron (BA.1 and BA.2) with IC₅₀ ranging from 0.02 – 0.05 µg/ml.</p> <p>This antibody was isolated by screening COVID-19-recovered individuals who had experienced mild symptoms after the ancestral Wuhan strain (WA.1) transmission in the year 2020. Antibody 002-S21F2 was the most potent mAb that neutralized live SARS-CoV-2 WA.1. Antibody 002-S21F2 has unique genetic features distinct from any reported SARS-CoV-2 mAbs. Structural studies of the full-length IgG in complex with spike trimers (Omicron and WA.1) reveal that 002-S21F2 recognizes an epitope on the outer face of RBD (class-3 surface), outside the ACE2 binding motif which enable it to overcome mutations found in the Omicron variants.</p>		
UniProt ID:	P0DTC2		
Origin:	Derived from a convalescing COVID-19 patient's plasma		
Specificity:	Recognizes SARS-CoV-2 Spike-RBD, Spike glycoprotein, S glycoprotein, E2, Peplomer protein, Spike protein S1, S, Alpha, Beta, Gamma, Delta, and Omicron variants.		
Source:	XtenCHO		
Purity:	> 95% by reduced and non-reduced SDS-PAGE		
Isotype:	Human IgG1		
Clone:	002-S21F2		
Concentration:	1.0 mg/ml, lot specific		
Formulation:	Sterile-filtered PBS, pH 7.5 preservative free.		
Purification:	Protein A affinity chromatography		
Applications:	Neutralization, Functional Assays		
Storage & Stability:	<p>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 single-use aliquots of undiluted product and store -20°C to -80°C.</p> <p>Avoid repeated freeze/thaw cycles.</p>		

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

