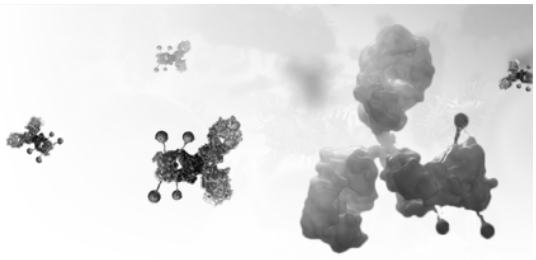

Recombinant SARS-CoV-2 S2 Protein (S2 ECD) [mFc] (DAGC270)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Spike Protein (S2 ECD) (YP_009724390.1) (Ser686-Pro1213) was expressed with the Fc region of human IgG1 at the C-terminus.
Species	SARS-CoV-2
Purity	> 95 % as determined by SDS-PAGE.
Conjugate	mFc
Applications	SDS-PAGE
Predicted N terminal	Ser 686
Molecular Weight	The recombinant SARS-CoV-2 (2019-nCoV) Spike Protein (S2 ECD, His tag) consists of 766 amino acids and predicts a molecular mass of 84.66 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Format	Lyophilized
Size	100 μg
Buffer	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Preservative	None
Storage	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

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BACKGROUND

Introduction	The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that SARS-CoV-2 (COVID-19 coronavirus, 2019-nCoV) 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.
Keywords	SARS-CoV-2; coronavirus; SARS-CoV-2 S2 ECD; SARS-CoV-2 spike protein; SARS-CoV-2 S2; SARS-CoV-2 ECD

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