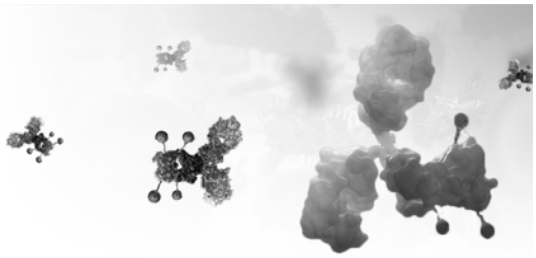

Recombinant SARS-CoV-2 S2 Protein (S2 ECD) [His] (DAGC153)

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 (SARS-CoV-2) Spike Protein (S2 ECD) (YP_009724390.1) (Ser686-Pro1213) was expressed with a polyhistidine tag at the C-terminus.
Species	coronavirus
Purity	> 90 % as determined by SDS-PAGE.
Conjugate	His
Applications	SDS-PAGE
Molecular Weight	59.37 kDa
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Format	Lyophilized
Size	100 μg
Buffer	Lyophilized from sterile 20 mM PB, 300 mM NaCl, 10 % glycerol, pH 7.0.
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.

BACKGROUND

Introduction	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 can

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	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. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.
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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