



Recombinant SARS-CoV-2 Spike Protein 1 (DAGC138)

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

PRODUCT INFORMATION

Product Overview	Recombinant SARS-CoV-2 S1 Protein is produced by our Mammalian expression system and the target gene encoding Gln14-Arg685 is expressed.
Species	coronavirus
Purity	Greater than 85% as determined by reducing SDSPAGE.
Conjugate	Unconjugated
Applications	SDS-PAGE, ELISA, Immunogen
Molecular Weight	78.3 kDa
Format	Liquid
Size	100 µg, 1 mg
Buffer	Supplied as a 0.2 µM filtered solution of PBS, pH 7.4
Preservative	None
Storage	Reconstituted protein solution should be stored at $\leq -20^{\circ}\text{C}$.
Ship	The product is shipped on dry ice pack.

BACKGROUND

Introduction	The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell: they are 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
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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. Most notable is severe acute respiratory syndrome (SARS). The severe acute respiratory syndrome-coronavirus (SARS-CoV) spike (S) glycoprotein alone can mediate the membrane fusion required for virus entry and cell fusion. It is also a major immunogen and a target for entry inhibitors. The SARS-CoV spike (S) protein is composed of two subunits; the S1 subunit contains a receptor-binding domain that engages with the host cell receptor angiotensin-converting enzyme 2 and the S2 subunit mediates fusion between the viral and host cell membranes. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity, during infection with SARS-CoV.

Keywords

SARS-CoV-2; coronavirus; SARS-CoV-2 S1; SARS-CoV-2 spike protein
