



Recombinant SARS-CoV-2 Spike-trimer (L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G, H655Y, T1027I, V1176F) Protein [His] (DAGC653)

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

PRODUCT INFORMATION

Product Overview	Recombinant 2019-nCoV S-trimer Protein is produced by our Mammalian expression system and the target gene encoding Cys15-Gln1208 is expressed with a 6His tag at the C-terminus. L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G, H655Y, T1027I, V1176F mutations were identified in the SARS-CoV-2 variant (known as variant P.1) which emerged in the Brazil.
Species	SARS-CoV-2
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Conjugate	His
Applications	ELISA
Molecular Weight	Mol Mass: 136.6kDa. AP Mol Mass: 170-220kDa, reducing conditions
Format	Liquid
Size	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 -20°C or below.

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 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; SARS-CoV-2 S Protein; SARS-CoV-2 Spike; SARS-CoV-2 S1+S2 ECD
