

## SARS-CoV-2 (2019-nCoV) Spike S1+S2 ECD-His Recombinant Protein

Catalog_no :	AD-PD400029
Category :	冠状病毒产品
Size :	100ug/1mg
Specificity :	2019-nCoV
Formulation :	Lyophilized from sterile 20 mM Tris, 300 mM NaCl, 10 % glycerol, pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Source :	Baculovirus-Insect Cells
Background :	<p>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. 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.</p>
Notes :	A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Spike Protein (S1+S2 ECD) (YP_009724390.1) (Val 16-Pro1213) was expressed with a polyhistidine tag at the C-terminus.
纯度 :	> 90 % as determined by SDS-PAGE.
运输及保存条件 :	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.
description :	A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Spike Protein (S1+S2 ECD) (YP_009724390.1) (Val 16-Pro1213) was expressed with a polyhistidine tag at the C-terminus.
内毒素 :	< 1.0 EU per µg protein as determined by the LAL method.



生物活性： The 2019-nCoV Spike Protein (S1+S2 ECD, His tag) can bind with Human ACE2 in functional ELISA assay.