CD Creative Diagnostics®

SARS-CoV-2 Spike Peptide (19 amino acids, C terminus) (DAGC316)

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

PRODUCT INFORMATION

Product Overview	19 amino acids near the carboxy terminus of SARS-CoV-2 (COVID-19, 2019-nCoV) Spike glycoprotein RBD.
Species	SARS-CoV-2
Conjugate	Unconjugated
Applications	SARS-CoV-2 Spike peptide is used for blocking the activity of the SARS-CoV-2 Spike antibody.
Format	Liquid
Concentration	200 ug/mL
Size	50 µg
Buffer	PBS pH 7.2 (10 mM NaH2PO4, 10 mM Na2HPO4, 130 mM NaCl) containing 0.1% bovine serum albumin and 0.02% sodium azide
Preservative	0.02% sodium azide
Storage	Store SARS-CoV-2 Spike peptide at -20˚C, stable for one year.

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 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

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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.