Recombinant SARS-CoV-2 Spike RBD (K458R) [His] (DAGC187)

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 Spike Protein (RBD) (YP_009724390.1(K458R)) (Arg319-Phe541) was expressed with a polyhistidine tag at the C-terminus.
Species	SARS-CoV-2
Purity	> 95 % as determined by SDS-PAGE.
Conjugate	His
Applications	SDS-PAGE, ELISA
Predicted N terminal	Arg319
Molecular Weight	The recombinant SARS-CoV-2 Spike Protein (RBD, His Tag) consists of 234 amino acids and predicts a molecular mass of 26.53 kDa.
Endotoxin	< 1.0 EU per µg protein as determined by the LAL method.
Format	Lyophilized
Size	100 µg, 1 mg
Buffer	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
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 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.

Keywords   SARS-CoV-2; coronavirus; SARS-CoV-2 spike RBD; SARS-CoV-2 spike protein