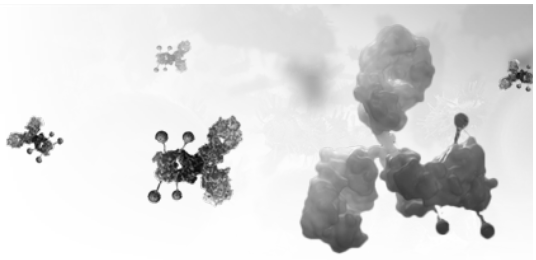

MERS-CoV Spike Protein (aa 367-606) [His] (DAGB201)

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

PRODUCT INFORMATION

Species	MERS-CoV
Purity	> 90 % as determined by SDS-PAGE.
Conjugate	His
Applications	ELISA
Predicted N terminal	Glu 367
Molecular Weight	The recombinant receptor binding domain (RBD) of spike protein (Human betacoronavirus 2c EMC/2012) consists 251 amino acids and predicts a molecular mass of 27.7 kDa.
Stability	Samples are stable for up to twelve months from date of receipt at -70°C
Endotoxin	<1.0 EU per μg protein as determined by the LAL method.
Format	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 7.4. (Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization.)
Size	100 μg
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

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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.

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