## Recombinant MERS-CoV S-trimer Protein?(R751S, C-6His)

## Catalog No. PKSV030287

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	MERS-CoV S protein;MERS-CoV S-trimer Protein;MERS-CoV Spike glycoprotein;MERS-CoV S glycoprotein
Species	MERS
Expression Host	HEK293 Cells
Sequence	Tyr18-Lys1294(R751S)
Accession	AFS88936.1
Calculated Molecular Weight	145 kDa
Observed molecular weight	170-220 kDa
Tag	C-His
Bioactivity	Immobilized MERS-CoV S-trimer Protein (R751S)-His(PKSV030287) at 5µg/ml (100 µl/well) can bind Human CD26-Fc(PKSH033696), The ED50 of Human CD26-Fc(PKSH033696) is 27.16 ng/ml.
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Store at $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 $\mu$ m filtered solution of PBS, pH7.4.
Reconstitution	Not Applicable

## Background

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, Oacetylated sialic acid. 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. 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.