## General Information

**Gene Name Synonym:**

coronavirus s1; coronavirus s2; coronavirus spike; cov spike; ncv RBD; ncv s1; ncv s2; ncv spike; RBD; S; s1; Spike RBD

**Protein Construction:**

A DNA sequence encoding the spike protein S1 Subunit MERS-CoV (AFS8936.1)(Met1-Glu725) was fused with a polyhistidine tag at the C-terminus.

**Source:**

MERS-CoV

**Expression Host:**

HEK293 Cells

**QC Testing**

**Purity:** > 95 % as determined by SDS-PAGE

**Bio Activity:**

1. Measured by its binding ability in a functional ELISA. Immobilized Spike Protein S1 (aa 1-725) (Cat: 40069-V08H) at 10 μg/ml (100 μl/well) can bind biotinylated human DPP4 (Cat: 10688-HNCH). The EC₅₀ of of biotinylated DPP4 (Cat: 10688-HNCH) is 0.6-1.39 μg/ml. 2. Measured by its binding ability in a functional ELISA. Immobilized Spike Protein S1 (aa 1-725) (Cat: 40069-V08H) at 10 μg/ml (100 μl/well) can bind biotinylated Fc-DPP4 (Cat: 10688-H01H). The EC₅₀ of biotinylated Fc-DPP4 (Cat: 10688-H01H) is 0.02-0.05 μg/ml.

**Endotoxin:**

< 1.0 EU per μg of the protein as determined by the LAL method

**Predicted N terminal:** Tyr 18

**Molecular Mass:**

The recombinant spike protein S1 Subunit MERS-CoV comprises 719 amino acids and has a predicted molecular mass of 79.9 kDa. It migrates as an approximately 94 kDa band in SDS-PAGE under reducing conditions.

**Formulation:**

Lyophilized from sterile PBS, pH 7.4

Normally 5% - 8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

**Usage Guide**

**Stability & Storage:**

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.