## MERS-CoV CoV Spike glycoprotein (aa 1-1297, His Tag)

Catalog Number: 503176



#### **General Information**

#### **Protein Construction**

A DNA sequence encoding the extracellular domain of spike protein (Human betacoronavirus 2c EMC/2012)( AFS88936.1) (Met1-Trp1297) was fused with a polyhistidine tag at the C-terminus.

## **Organism**

MERS-CoV

## **Expression Host**

Baculovirus-Insect Cells

## **QC Testing**

## Activity

Measured by its binding ability in a functional ELISA.

- 1. Immobilized Spike (HCoV-EMC/2012) (ECD, aa 1-1297) (Cat: 503176) at 10  $\mu$ g/ml (100  $\mu$ l/well) can bind biotinylated human ACE2-Fc (Cat: 501568). The EC<sub>50</sub> of biotinylated human ACE2-Fc (Cat: 501568) is 0.9-1.4  $\mu$ g/ml.
- 2. Immobilized Spike (HCoV-EMC/2012) (ECD, aa 1-1297) (Cat: 503176) at 10  $\mu$ g/ml (100  $\mu$ l/well) can bind biotinylated DPP4 (Cat: 502818). The EC<sub>50</sub> of of biotinylated DPP4 (Cat: 502818) is 0.02-0.04  $\mu$ g/ml.
- 3. Immobilized Spike (HCoV-EMC/2012) (ECD, aa 1-1297) (Cat: 503176) at 10  $\mu$ g/ml (100  $\mu$ l/well) can bind biotinylated Fc-DPP4 (Cat: 504194). The EC<sub>50</sub> of biotinylated Fc-DPP4 (Cat: 504194) is 0.01-0.02  $\mu$ g/ml.

## **Purity**

> 85 % as determined by SDS-PAGE

## **Endotoxin**

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method

## **Stability**

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}\text{C}$ 

#### **Predicted N terminal**

Tyr 18

#### **Molecular Mass**

The recombinant extracellular domain of spike protein (Human betacoronavirus 2c EMC/2012) comprises 1289 amino acids and has a predicted molecular mass of 142.2 kDa. It migrates as an approximately 157 kDa band in SDS-PAGE under reducing conditions.

#### **Formulation**

Lyophilized from sterile 20mM Tris, 500mM Nacl, pH 7.4, 10% glycerol.

- 1. 5 % trehalose and mannitol are added as protectants before lyophilization.
- 2. Please contact us for any concerns or special requirements.

## **Usage Guide**

#### **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.

#### Reconstitution

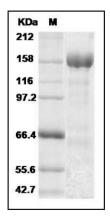
Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

#### **SDS-PAGE**

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Novel coronavirus (HCoV-EMC/2012) Spike Protein (aa 1-1297, His Tag) SDS-PAGE