

# MERS-CoV CoV Spike glycoprotein (aa 383-502, Fc Tag)



Catalog Number: 503810

## General Information

### Protein Construction

A DNA sequence encoding the spike protein fragment (Human betacoronavirus 2c EMC/2012)(AFS88936.1)(Cys383-Lys502) was fused with the Fc region of rabbit IgG 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) (Cat: 503810) at 10 µg/ml (100 µl/well) can bind biotinylated human ACE2-Fc (Cat: 501568). The EC<sub>50</sub> of biotinylated human ACE2-Fc (Cat: 501568) is 0.04-0.06 µg/ml.

2. Immobilized Spike (HCoV-EMC/2012) (Cat: 503810) at 10 µg/ml (100 µl/well) can bind biotinylated DPP4 (Cat: 502818). The EC<sub>50</sub> of biotinylated DPP4 (Cat: 502818) is 0.10-0.16 µg/ml.

3. Immobilized Spike (HCoV-EMC/2012) (Cat: 503810) at 10 µg/ml (100 µl/well) can bind biotinylated Fc-DPP4 (Cat: 504194). The EC<sub>50</sub> of biotinylated Fc-DPP4 (Cat: 504194) is 0.15-0.23 µg/ml.

### Purity

> 85 % as determined by SDS-PAGE

### Endotoxin

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

## Stability

Samples are stable for up to twelve months from date of receipt at -70°C

## Predicted N terminal

Cys 383

## Molecular Mass

The recombinant spike protein fragment (Human betacoronavirus 2c EMC/2012) comprises 344 amino acids and has a predicted molecular mass of 38.5 kDa. It migrates as an approximately 42 kDa band in SDS-PAGE under reducing conditions.

## Formulation

Lyophilized from sterile 100mM Glycine, 100mM NaCl, pH 7.0.

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.

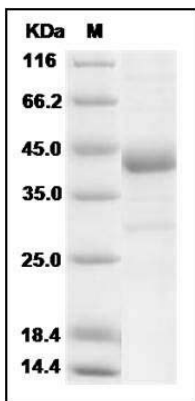
### SDS-PAGE

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Novel coronavirus (HCoV-EMC/2012) Spike  
Protein fragment (aa 383-502, Fc Tag) SDS-PAGE