

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 µg/ml (100 µl/well) can bind biotinylated human ACE2-Fc (Cat: 501568). The EC_{50} of biotinylated human ACE2-Fc (Cat: 501568) is 0.9-1.4 µg/ml.
2. Immobilized Spike (HCoV-EMC/2012) (ECD, aa 1-1297) (Cat: 503176) at 10 µg/ml (100 µl/well) can bind biotinylated DPP4 (Cat: 502818). The EC_{50} of biotinylated DPP4 (Cat: 502818) is 0.02-0.04 µg/ml.
3. Immobilized Spike (HCoV-EMC/2012) (ECD, aa 1-1297) (Cat: 503176) at 10 µg/ml (100 µl/well) can bind biotinylated Fc-DPP4 (Cat: 504194). The EC_{50} of biotinylated Fc-DPP4 (Cat: 504194) is 0.01-0.02 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

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

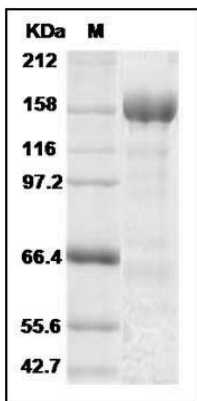
Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

SDS-PAGE

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