

Recombinant Coronavirus Spike Protein (MERS-CoV S1; 56-295)

CATALOG NO: P1514-10 10 µg
P1514-50 50 µg

ALTERNATE NAMES: Spike glycoprotein, S glycoprotein, E2, Peplomer protein

SOURCE: *E. coli*

PURITY: >95%

FORM: Liquid

FORMULATION: 10 mM Phosphate Buffered Saline, pH 7.2 with 25 mM Arginine, 0.05% Sodium Azide

STORAGE CONDITIONS: Store at 2-8°C for short term (≤ 1 week). For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing.

DESCRIPTION: MERS-CoV spike protein plays an important role in virus binding and entry, and the development of MERS-CoV entry/fusion inhibitors targeting the S1 subunit, particularly the receptor-binding domain, and the S2 subunit, especially the HR1 region, of the MERS-CoV spike protein. Spike glycoprotein cleaved into three chains: S1, S2' and S2. S1 attaches the virion to the cell membrane by interacting with host receptor, initiating the infection. S2' acts as a viral fusion peptide which is unmasked following S2 cleavage occurring upon virus endocytosis. S2 mediates fusion of the virion and cellular membranes by acting as a class I viral fusion protein. Under the current model, the protein has at least three conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes.

AMINO ACID SEQUENCE: aa 56-295 (His tag)

RELATED PRODUCTS:

- Recombinant Coronavirus Nucleoprotein (CoV-NP-NL63) (P1507)
- Recombinant Coronavirus Nucleoprotein (SARS-CoV; 340-390) (P1508)
- Recombinant Coronavirus Matrix Protein (SARS-CoV; 182-216) (P1504)
- Recombinant Coronavirus Membrane Protein (SARS-CoV) (P1505)
- Recombinant Coronavirus Nucleoprotein (CoV-NP 229E) (P1506)
- Recombinant Coronavirus Nucleoprotein (SARS-CoV) (P1509)
- Recombinant Coronavirus Nucleoprotein (SARS-CoV; 1-49) (P1510)
- Recombinant Coronavirus Nucleoprotein (SARS-CoV; 1-49, 192-220) (P1511)
- Recombinant Coronavirus Nucleoprotein (SARS-CoV NP; 340-390) (P1512)
- Human CellExp™ Coronavirus Spike Protein (MERS-CoV S1; 18-725), Recombinant (P1513)
- Recombinant Coronavirus Spike Protein (SARS-CoV S1; 12-53, 90-115, 171-203) (P1515)
- Recombinant Coronavirus Spike Protein (SARS-CoV S1; 1-53, 90-115, 171-205, His tag) (P1516)
- Recombinant Coronavirus Spike Protein (SARS-CoV S2; 408-470, 540-573, His Tag) (P1517)
- Recombinant Coronavirus Spike Protein (SARS-CoV S2; 408-470, 540-573) (P1518)
- Recombinant Coronavirus Spike Protein (SARS-CoV S2) (P1519)
- Recombinant Coronavirus Spike Protein (SARS-CoV S, His tag) (P1520)
- Recombinant Coronavirus Nucleoprotein (CoV-NP-NL63) (P1507)

FOR RESEARCH USE ONLY! Not to be used on humans.