Human CellExp™ SARS-CoV-2 Spike Protein, Recombinant

**CATALOG NO:**  
P1547-10     10 μg  
P1547-50     50 μg

**MOL. WT.**  
180 kDa (C-terminus His-tag)

**SOURCE:**  
HEK 293 cells

**PURITY:**  
>95% SDS - PAGE

**ENDOTOXIN:**  
< 0.1 EU/μg of the protein by LAL method.

**FORM:**  
Liquid

**FORMULATION:**  
Supplied as a 0.22 μm filtered solution in PBS, pH 7.4.

**SPECIFIC ACTIVITY:**  
Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 S1+S2 ECD (S-ECD) at 2 μg/mL (100 μL/well) can bind recombinant Human ACE2 with a linear range of 0.15-3.72 ng/mL.

**STORAGE CONDITIONS:**  
Store at -70°C. For long term storage, aliquot, and store at -70°C. Avoid repeated freezing and thawing.

**DESCRIPTION:**  
SARS-CoV is an enveloped, single and positive-stranded RNA virus. Cell entry of severe acute respiratory syndrome coronavirus (SARS-CoV) is mediated by the viral spike (S) protein. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. For viral entry, the surface unit (S1) of SARS S binds to the cellular receptor angiotensin-converting enzyme 2 (ACE2) and the transmembrane unit (S2) then fuses the viral membrane with a host cell membrane. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity, during infection with SARS-CoV. Because the S protein of SARS-CoV is involved in receptor recognition, as well as virus attachment and entry, it represents one of the most important targets for the development of SARS vaccines and therapeutics.

**AMINO ACID SEQUENCE:**  
Val11-Gln1208 (Spike protein S1+S2 ECD with 6×His tag at the C-terminus)

[Graph showing binding ability of recombinant Human ACE2 with SARS-CoV-2 Spike Protein]
Recombinant SARS-CoV-2 S1+S2 ECD(S-ECD) Protein with His tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 180 kDa.

RELATED PRODUCTS:

- Recombinant Coronavirus Nucleoprotein (CoV-NP-NL63) (P1507)
- Human CellExp™ Coronavirus Spike Protein (SARS-CoV-2; S2), Recombinant (P1525)
- Recombinant Coronavirus Spike Protein (SARS-CoV S1; 1-53, 90-115, 171-205, His tag) (P1516)
- Recombinant Coronavirus Nucleoprotein (SARS-CoV; 340-390) (P1508)
- Human CellExp™ Coronavirus Spike Protein (SARS-CoV-2; S1), Recombinant (P1524)
- 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)

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