Proteins

Product Data Sheet



SARS-CoV-2 S glycoprotein (V367F, HEK293, His)

Cat. No.: HY-P72040

Synonyms: E2 Peplomer protein

Species: Virus HEK293 Source:

P0DTC2 (R319-F541, V367F) Accession:

Gene ID: 43740568

Molecular Weight: Approximately 27.9 kDa

PROPERTIES

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| AA | - | മവ | 11 | ΔI | n | \sim |
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RVQPTESIVR FPNITNLCPF GEVFNATRFA SVYAWNRKRI SNCVADYSFL YNSASFSTFK CYGVSPTKLN DLCFTNVYAD SFVIRGDEVR QIAPGQTGKI ADYNYKLPDD FTGCVIAWNS NNLDSKVGGN YNYLYRLFRK SNLKPFERDI STEIYQAGST PCNGVEGFNC RVVVLSFELL YFPLQSYGFQ PTNGVGYOPY

HAPATVCGPK KSTNLVKNKC VNF

Appearance

Lyophilized powder.

Formulation

Lyophilized from a 0.2 μm solution of 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0.

Endotoxin Level

<1 EU/ μ g, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH₂O.

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

SARS-CoV-2, causes the global pandemic coronavirus disease 2019 (Covid-19). SARS-CoV-2 belongs to a family of viruses known as coronaviruse. SARS-CoV-2 is the third human coronavirus this century known to cause pneumonia with a significant case-fatality rate.

SARS-CoV-2 is comprised of four structural proteins: Spike protein (S protein), Envelope protein (E), Membrane protein (M), and Nucleocapsid protein (N).

D614G does not alter S protein synthesis, processing, or incorporation into SARS-CoV-2 particles, but D614G affinity for ACE2 is reduced due to a faster dissociation rate^{[2][3]}.

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REFERENCES

- [1]. Junxian Ou, et al. V367F Mutation in SARS-CoV-2 Spike RBD Emerging during the Early Transmission Phase Enhances Viral Infectivity through Increased Human ACE2 Receptor Binding Affinity. J Virol. 2021 Jul 26;95(16):e0061721.
- [2]. Leonid Yurkovetskiy, et al. Structural and Functional Analysis of the D614G SARS-CoV-2 Spike Protein Variant. Cell. 2020 Oct 29;183(3):739-751.e8.
- [3]. Jessica A Plante, et al. Spike mutation D614G alters SARS-CoV-2 fitness. Nature. 2021 Apr;592(7852):116-121.

Caution: Product has not been fully validated for medical applications. For research use only.

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