

Synonym

Spike, S1 protein, Spike glycoprotein Subunit1, S glycoprotein Subunit1, Spike protein S1

Source

HCoV-229E S1 protein, His Tag (SIN-V52H4) is expressed from human 293 cells (HEK293). It contains AA Cys 16 - Ala 536 (Accession # [P15423-1](#)).

Predicted N-terminus: Cys 16

Molecular Characterization

S1 protein(Cys 16 - Ala 536) P15423-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 58.8 kDa. The protein migrates as 70-110 kDa under reducing (R) condition (SDS-PAGE) due to Glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

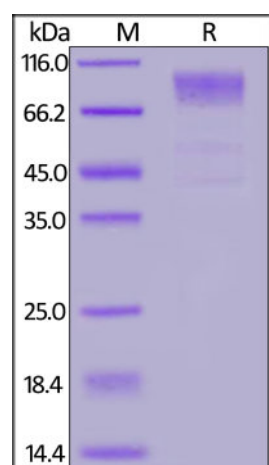
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



HCoV-229E S1 protein, His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Background

Human coronavirus 229E (HCoV-229E) is one of seven known coronaviruses to infect humans. Likely originated from bats, it is an enveloped, positive-sense, single-stranded RNA virus which enters its host cell by binding to the APN receptor. Along with Human coronavirus OC43 (a member of the Betacoronavirus genus), it is one of the viruses responsible for the common cold. The spike protein of HCoV-229E is a trimer with subunits S1 and S2 responsible for host receptor binding and fusion of the viral and host cell membranes, respectively.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.