

#### Overview

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| <b>Description</b>       | Recombinant SARS-CoV-2 S +M +E protein is produced by E.coli expression system and the target gene encoding Met1-Tyr265 & Met1-Leu102 & Met1-Val75 is expressed with a 6His tag at the N-terminus. |
| <b>Expression system</b> | E.coli   |
| <b>Species</b>           | Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)   |
| <b>Alternative names</b> | Spike glycoprotein,Membrane protein,Envelope small membrane protein, E protein   |
| <b>Accession #</b>       | S(QHD43416.1) &M(QHD43419.1)&E(QHD43418.1)   |

#### Specifications

|                                 |  |
|---------------------------------|--|
| <b>Predicted Molecular Mass</b> | 45.56kDa   |
| <b>Actual Molecular Mass</b>    | 45.56kDa, reducing conditions  |
| <b>Purity</b>                   | >90% as determined by SDS-PAGE quantitative densitometry by Coomassie Blue Staining. |
| <b>Endotoxin level</b>          | Please contact with the lab for this information                                     |
| <b>Bioactivity</b>              | Testing in progress  |
| <b>Formulation</b>              | Supplied as lyophilized from PBS, pH7.5  |

#### Preparation and storage

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|-------------------------------|---|
| <b>Shipping</b>               | In general, proteins are shipped out with blue ice unless customers require otherwise.  |
| <b>Stability &amp;Storage</b> | Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 °C for one week .<br>Store at -20 to -80 °C for twelve months from the date of receipt. |
| <b>Reconstitution</b>         | Reconstitute in ddH <sub>2</sub> O to a concentration of 0.1-1.0 mg/mL. Do not vortex.  |

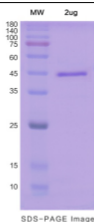
### Background

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Coronavirus envelope (E) proteins are short (100 residues) polypeptides that contain at least one transmembrane (TM) domain and a cluster of 2-3 juxtamembrane cysteines. These proteins are involved in viral morphogenesis and tropism, and their absence leads in some cases to aberrant virions, or to viral attenuation. In common to other viroporins, coronavirus envelope proteins increase membrane permeability to ions, plays a central role in virus morphogenesis and assembly. Acts as a viroporin and self-assembles in host membranes forming pentameric protein-lipid pores that allow ion transport. Also plays a role in the induction of apoptosis. Activates the host NLRP3 inflammasome, leading to IL-1beta overproduction.

### SDS-PAGE image

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### Note

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For research use only. Not for use in clinical diagnostic procedures.