## Synonym

Envelope protein,Env polyprotein,Envelope glycoprotein,env,COVID-19

## Source

SARS-CoV-2 Envelope protein, GST,His Tag (ENN-C5128) is expressed from E.coli cells. It contains AA Met 1 - Val 75 (Accession \# QHU79206.1). Predicted N-terminus: Met

## Molecular Characterization

GST Envelope protein(Met 1-Val 75) Poly-his

This protein carries a GST tag at the N-terminus and a polyhistidine tag at the Cterminus.

The protein has a calculated MW of 36.8 kDa . The protein migrates as $33-35$
kDa under reducing ( R ) condition (SDS-PAGE).

## Endotoxin

Less than 1.0 EU per $\mu \mathrm{g}$ by the LAL method.

## Purity

## Formulation

Lyophilized from $0.22 \mu \mathrm{~m}$ filtered solution in 20 mM Tris, 5 mM EDTA, Arginine, pH 8.0 . Normally sucrose 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 $-20^{\circ} \mathrm{C}$ or lower.

Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

- $-20^{\circ} \mathrm{C}$ to $-70^{\circ} \mathrm{C}$ for 12 months in lyophilized state;
- $-70^{\circ} \mathrm{C}$ for 3 months under sterile conditions after reconstitution.


## SDS-PAGE



SARS-CoV-2 Envelope protein, GST,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

The SARS-CoV-2 is composed of a double-layered lipid envelope, including Spike glycoprotein (S), Envelope protein (E), Membrane glycoprotein (M), and Nucleocapsid protein (Nucleocapsid protein, N). Among them, The amino acid sequence of the SARS-CoV-2 envelope protein is $95 \%$ identical of the SARS envelope protein.

## References

(1) Schoeman D, et al. Virol J. 2019. 16(1):69.

