

Synonym

Glycoprotein C, g Protein

Source

LCMV Glycoprotein C (R262A) Protein, His Tag(CLN-L52H2) is expressed from human 293 cells (HEK293). It contains AA Met 59 - Asp 438 (Accession # [AJ297484.1](#) (R262A)).

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 48.6 kDa. The protein migrates as 66-70 kDa and 80-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

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

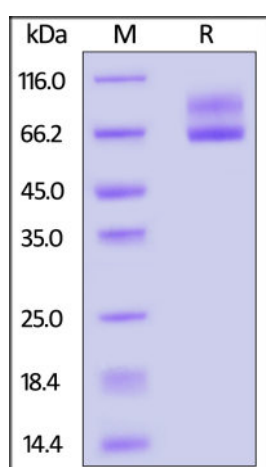
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



LCMV Glycoprotein C (R262A) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Lymphocytic choriomeningitis virus (LCMV) is a spherical enveloped virus with an RNA genome consisting of two negative single-stranded RNA segments, the large (L) strand and the small (S) strand. The L strand encodes the virus polymerase (L) and a small zinc finger motif protein (Z); the smaller (S) segment encodes the two main structural proteins: virus nucleoprotein (NP) and glycoprotein (GP) precursor (GPC). The GP of LCMV serves as virus attachment protein to its receptor on host cells and is a key determinant for cell tropism, pathogenesis, and epidemiology of the virus. The GP undergoes post-translational cleavage and results in the synthesis of two mature virion glycoproteins, GP-1 (40 to 46 kDa) and GP-2 (35 kDa). The spikes present on the virion envelope are dictated by

tetramer formation of GP-1 and GP-2. The peripheral GP-1 is implicated in receptor binding, and the transmembrane GP-2 is structurally similar to the fusion active membrane proximal portions of the glycoproteins of other enveloped viruses.

Clinical and Translational Updates

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