# LCMV Glycoprotein C (R262A) Protein, His Tag

Catalog # CLN-L52H2



#### 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 # <u>AJ297484.1</u> (R262A)).

### **Molecular Characterization**

R262A Glycoprotein C (Met 59 - Asp 438) AJ297484.1 Poly-his

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  $\mu g$  by the LAL method.

## Purity

>95% as determined by SDS-PAGE.

#### Formulation

Lyophilized from  $0.22 \ \mu m$  filtered solution in PBS,  $0.5 \ M$  Arginine, pH 7.3 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;
- $70^{\circ}$ C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**

kDa	М	R
116.0		_
66.2	-	-
45.0	-	
35.0	-	
25.0	-	
18.4		
14.4	-	

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



Catalog # CLN-L52H2



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** 



>>> www.acrobiosystems.com

