

Human cytomegalovirus (HCMV) Glycoprotein B / gB Protein (Fc Tag)

Catalog Number: 10202-V02H1



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CMV gB; Glycoprotein B

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Lys 700) linked with the cytoplasmic domain (Arg 777-Val 907) of human CMV gB (AAA45920.1, with furin cleavage site mutated from 'RTKR' to 'TTQT') precursor was fused with the Fc region of human IgG1 at the C-terminus.

Source: CMV

Expression Host: Human Cells

QC Testing

Purity: > 80 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to bind biotinylated Human CD209-Fc (Cat:10200-H01H) in functional ELISA.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Asn 25

Molecular Mass:

The recombinant human CMV glycoprotein B/Fc is a disulfide-linked homodimer after removal of the signal peptide. The reduced monomer consists of 1045 amino acids and has a predicted molecular mass of 118 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of gB/Fc monomer is approximately 160-170 kDa due to glycosylation.

Formulation:

Lyophilized from sterile 100mM Gly, 10mM NaCl, 50mM Tris, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

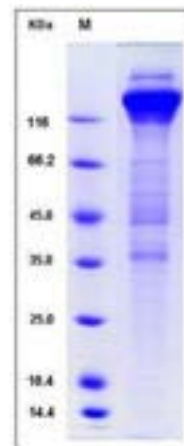
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Human cytomegalovirus (CMV) (human herpesvirus 5) glycoprotein B, also referred as CMV gB or gB, which belongs to the herpesviridae glycoprotein B family. It is a 907-amino acid glycoprotein encoded by the ORF of UL55. Cytomegalovirus Glycoprotein B protein is the most abundant component of the envelope, a target of neutralizing antibodies with at least two defined neutralizing epitopes and an essential replication component. Cytomegalovirus Glycoprotein B protein plays important roles in HCMV entry, cell-cell spread of internal virions, and fusion of infected cells. In addition, Cytomegalovirus Glycoprotein B protein is one envelope protein capable of heparin binding. It forms a physical association with host cell annexin II independent of the presence of calcium.

References

1. Lopper M, et al. (2002). Disulfide bond configuration of human cytomegalovirus glycoprotein B. J Virol. 76(12): 6073-82.
2. Isaacson MK, et al. (2009) Human cytomegalovirus glycoprotein B is required for virus entry and cell-to-cell spread but not for virion attachment, assembly, or egress. J Virol. 83(8): 3891-903.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>