

Synonym

Glycoprotein B/gB (HCMV)

Source

HCMV Glycoprotein B (gB) Protein, Fc Tag(CMB-V5255) is expressed from human 293 cells (HEK293). It contains AA Val 23 - Lys 700 (Accession # P13201-1).

Predicted N-terminus: Val 23

Molecular Characterization

Glycoprotein B(Val 23 - Lys 700)	Fc(Pro 100 - Lys 330)
P13201-1	P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 104.0 kDa. The protein migrates as 130-180 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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

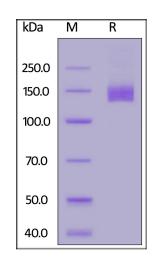
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



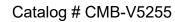
HCMV Glycoprotein B (gB) Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Background

Human cytomegalovirus is a species of the Cytomegalovirus genus of viruses, which in turn is a member of the viral family known as Herpesviridae or herpesviruses. It is typically abbreviated as HCMV or, commonly but more ambiguously, as CMV. CMV Virus Envelope Glycoportein B (CMV-GB) can be cleaved into glycoprotein GP55. Envelope glycoprotein that plays a role in host cell entry, cell to-cell virus transmission, and fusion of infected cells. CMV-GB may be involved in the initial attachment via binding to heparan sulfate together with the gM/gN complex that binds heparin with higher affinity. Furthermore, CMV-GB can



HCMV Glycoprotein B (gB) Protein, Fc Tag





interact with host integrin ITGB1, PDGFRA and EGFR that likely serve as postattachment entry receptors. Also, CMV-GB participates in the fusion of viral and cellular membranes leading to virus entry into the host cell. Membrane fusion is mediated by the fusion machinery composed at least of gB and the heterodimer gH/gL.

