Human cytomegalovirus (HCMV) Glycoprotein B / gB Protein

Catalog Number: 10202-VCCH1

General Information

Gene Name Synonym:
gB

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') was expressed, fused with five additional amino acids (DDDDK) at the C-terminus.

Source: CMV

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

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: Ser 25

Molecular Mass:
The recombinant glycoprotein B of human CMV consists of 813 amino acids and has a predicted molecular mass of 92 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of gB is approximately 130-140 kDa due to glycosylation.

Formulation:
Lyophilized from sterile Tris 50mM, NaCl 100mM, pH 8.0
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.

Protein Description

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.