

Recombinant CMV UL55

Cat. No. UL55-179C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	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) was expressed, fused with five additional amino acids (DDDDK) at the C-terminus.
Species	CMV
Source	Human Cells
ProteinLength	Met1-Lys700 & Arg777-Val907
Description	Human cytomegalovirus(CMV) (human herpesvirus 5) glycoprotein B is a 907-amino acid glycoprotein encoded by the ORF of UL55. It is the most abundant component of the envelope with at least two defined neutralizing epitopes, a target of neutralizing antibodies and an essential replication component. The synthesized gB precursor matures into a 130-160 kDa glycoprotein by acquiring N-linked glycosylation modifications, and is cleaved by the cellular protease furin into two components, a 93-116 kDa N-terminal fragment and a 55 kDa C-terminal fragment linked by a disulfide-bond, which is presented on the viral envelope as well as on the surface of virus-infected cells as a covalently associated homodimer. gB plays important roles in HCMV entry, cell-cell spread of internal virions, and fusion of infected cells. It triggers penetration of cells and enhances the spread of infection in nonpolarized human fibroblasts. The interaction of gB with the non-heparin receptor CD209/DC-SIGN is the initiation of intracellular signaling and activation of the IFN-responsive pathway. In addition, gB is one envelope protein capable of heparin binding. It forms a physical

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	association with host cell annexin II independent of the presence of calcium.
Form	Lyophilized from sterile PBS, pH7.4.
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.
Endotoxin	< 1.0 eu per µg of the protein as determined by the LAL method.
Purity	>90 % as determined by SDS-PAGE
Stability	Samples are stable for up to twelve months from date of receipt at -70°C
Storage	Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	Hardcopy of COA with reconstitution instruction is sent along with the products.

GENE INFORMATION

Gene Name	UL55 type 1 membrane protein; possible membrane fusogen; binds cell surface heparan sulphate; involved in cell entry; involved in cell-to-cell spread [Human herpesvirus 5 (Human cytomegalovirus)]
Official Symbol	UL55
Synonyms	UL55; type 1 membrane protein; possible membrane fusogen; binds cell surface heparan sulphate; involved in cell entry; involved in cell-to-cell spread; envelope glycoprotein B

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	3077424
Protein Refseq	YP_081514
UniProt ID	Q6SW76

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA