Data Sheet (Cat.No.TMPY-06816)

TargetMol

HSV 2 (strain 333) Glycoprotein B/gB Protein (His)

General Information

Protein Construction:	A DNA sequence encoding the HSV 2 (strain 333 (HSV2)) gB (translated amino acids of P06763) (Glu98-Ala730) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Glu 98
Species:	HSV2
Expression Host:	Baculovirus Insect Cells
Accession:	P06763
Molecular Weight:	73.88 kDa (predicted); 71.01 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	≥ 95 % as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 200 mM NaCl, 20% glycerol, pH 8.0.Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

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 97-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.

Reference

Lopper M,et al.(2002). Disulfide bond configuration of human cytomegalovirus glycoprotein B. J Virol. 76(12): 6073-82.

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.