

Antibody Datasheet / Certificate of Analysis

Product Name:	Sheep anti-CMV pentamer
Clone number:	Polyclonal
Isotype:	Sheep IgG
Product code:	AbCMV2450-500
Batch Number:	16041510
Immunogen:	Recombinant Cytomegalovirus pentamer protein, containing gH, gL, UL128, UL130, and UL131A proteins
Amount:	500ug
Concentration:	1 mg/ml
Buffer:	Phosphate Buffered Saline pH7.4
Preservative:	None present. 0.2um filtered.
Purification:	Antibody was purified from sheep serum by affinity chromatography on Protein G
Specificity:	This antibody recognises CMV gH, gL, UL128, UL130, and UL131A proteins
Applications:	Direct ELISA Sandwich ELISA (may be used both as detection and capture antibody) Western Blot

Antigen background: The Cytomegalovirus gH Pentamer Complex comprises five viral proteins (gH, gL, UL128, UL130, and UL131A).

hCMV can cause serious morbidity/mortality in immune compromised individuals such as transplant recipients and HIV patients, and congenital HCMV infection can lead to birth defects.

The Cytomegalovirus gH Pentamer Complex is expressed on all wildtype hCMV strains but is notably missing from laboratory strains such as AD169. (*Freed et al. Proc Natl Acad Sci U S A. 2013 Dec 17;110(51):E4997-5005. doi: 10.1073/pnas.1316517110. Epub 2013 Dec 2*). This has placed severe limitations on vaccine development. Receptor-mediated viral entry into endothelial cells requires a functional gH pentameric complex, and this complex is one of the primary targets for antiviral antibodies in infected individuals.

Storage:

Store at +4°C for up to one week, or at -20°C for longer periods
For long term storage at +4°C the addition of 0.09% w/v sodium azide is recommended.
The antibody is shipped at ambient temperature.
Avoid repeated freeze/thaw cycles.

Western blot data

Antigen was loaded onto a NuPAGE 4-12% Bis-Tris gel (Life Technologies) and separated at 200V for 55 minutes. Western blot was performed using a Transblot Turbo system (Biorad) with pre-packed nitrocellulose membrane (Biorad). As blocking agent 5% non-fat milk powder in PBS-T was used. Antibodies were used at concentrations of 1ug/ml. Secondary antibody used was donkey-anti-sheep-IgG-HRP (Bio-Rad). Western blots were developed using TMB Membrane (KPL).

