



# Recombinant Cytomegalovirus UL146 Protein(a.a. 23-117) (DAG2631)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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|----------------------------|---|
| <b>Product Overview</b>    | Recombinant Viral CMV UL146/vCXC1 was expressed in E. coli. Thr23-Gly117 (Accession # AAA85885)   |
| <b>Antigen Description</b> | Cytomegalovirus (CMV), a member of the beta herpesvirus subfamily, typically causes subclinical or latent infections in the normal adult population. However, CMV can cause congenital disease during pregnancy and is a human opportunistic pathogen that affects immunocompromised individuals. The CMV genome has been shown to contain homologs of cellular immunomodulatory proteins, including US28 (a CC chemokine receptor) and a MHC class I homolog. Virulent CMV clinical isolates have also been shown to carry at least 19 genes, designated UL133 - UL151, that are not found in laboratory strains that have lost virulence characteristics. Two of these genes, UL146 and UL147, exhibit sequence similarity to CXC chemokines. The CMV UL146 open-reading frame encodes a 117 amino acid residue precursor protein with a predicted 22 residues signal peptide that is cleaved to generate the mature protein. |
| <b>Species</b>             | CMV   |
| <b>Purity</b>              | > 97%, by SDS-PAGE under reducing conditions and visualized by silver stain.  |
| <b>Conjugate</b>           | Unconjugated  |
| <b>Format</b>              | Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA with BSA as a carrier protein.  |
| <b>Preservative</b>        | None  |
| <b>Storage</b>             | 2-8°C short term, -20°C long term   |

## BACKGROUND

**Introduction**

Cytomegalovirus (from the Greek *cyto*-, "cell", and *-megalo*-, "large") is a viral genus of the viral family known as Herpesviridae or herpesviruses. It is typically abbreviated as CMV. The species that infects humans is commonly known as human CMV (HCMV) or human herpesvirus-5 (HHV-5), and is the most studied of all cytomegaloviruses. Within Herpesviridae, CMV belongs to the Betaherpesvirinae subfamily, which also includes the genera *Muromegalovirus* and *Roseolovirus* (HHV-6 and HHV-7). It is related to other herpesviruses within the subfamilies of Alphaherpesvirinae that includes herpes simplex viruses (HSV)-1 and -2 and varicella-zoster virus (VZV), and the Gammaherpesvirinae subfamily that includes Epstein–Barr virus. All herpesviruses share a characteristic ability to remain latent within the body over long periods. Although they may be found throughout the body, CMV infections are frequently associated with the salivary glands in humans and other mammals. Other CMV viruses are found in several mammal species, but species isolated from animals differ from HCMV in terms of genomic structure, and have not been reported to cause human disease.

**Keywords**

CMV UL146; UL146; Viral CMV UL146/vCXC1; Human herpesvirus 5; orf UL146 [Human herpesvirus 5]; orf UL146; Cytomegalovirus; Cytomegalovirus UL146/vCXC1 protein