



CMV pp65 (residues 297-510)

Cytomegalo Virus Phosphoprotein 65 recombinant, *E. coli*

Cat. No.	Amount
PR-1251	100 µg

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: 52.2 kDa +26 kDa GST

Purity: > 95 % (SDS-PAGE)

Form: liquid (Supplied in 1x PBS)

Applications:

Antigen in ELISA and Western blots, excellent antigen for detection of CMV with minimal specificity problems.

Description:

The protein contains the CMV pp65 immunodominant regions, amino acids 297-510. It is fused to a 26 kDa GST-tag. The protein is purified by proprietary chromatographic technique.

Background: The *E. coli* derived protein contains the CMV Pp65 immunodominant regions, 297-510 aa. It is fused to a GST tag. Human cytomegalovirus (HCMV), a member of the herpesvirus family, demonstrates cell specificity for virus assembly and release. CMVpp65 (UL83), in addition to being a major constituent of dense bodies, plays a critical role in cell-mediated immunity to HCMV infection. The majority of HCMV-seropositive individuals possess CD8⁺ cytotoxic T-lymphocyte responses directed against pp65, and the adoptive transfer of pp65-specific cytotoxic T lymphocytes isolated from HCMV-seropositive bone marrow donors to transplant recipients has been shown to confer protection against HCMV viremia and pneumonitis. These observations have provided support for the concept of development of pp65 vaccines for prevention of HCMV infection.

Specificity: Immunoreactive with sera of CMV-infected individuals.

Selected References:

McGregor *et al.* (2004) Molecular, biological, and *in vivo* characterization of the guinea pig cytomegalovirus (CMV) homologs of the human CMV matrix proteins pp71 (UL82) and pp65 (UL83). *J. Virol.* **78**:9872.

Browne *et al.* (2003) Human cytomegalovirus UL83-coded pp65 virion protein inhibits antiviral gene expression in infected cells. *Proc. Natl. Acad. Sci. USA* **100**:11439.

Lenfant *et al.* (2003) Induction of HLA-G-restricted human cytomegalovirus pp65 (UL83)-specific cytotoxic T lymphocytes in HLA-G transgenic mice. *J. Gen. Virol.* **84**:307.

Arrode *et al.* (2002) Cross-presentation of human cytomegalovirus pp65 (UL83) to CD8⁺ T cells is regulated by virus-induced, solublemediator- dependent maturation of dendritic cells. *J. Virol.* **76**:142.

Arrode *et al.* (2000) Incoming human cytomegalovirus pp65 (UL83) contained in apoptotic infected fibroblasts is cross-presented to CD8⁺ T cells by dendritic cells. *J. Virol.* **74**:10018.

Schleiss *et al.* (2000) Immunogenicity evaluation of DNA vaccines that target guinea pig cytomegalovirus proteins glycoprotein B and UL83. *Viral. Immunol.* **13**:155.