

CMV pp65 (residues 297-510) Cytomegalo Virus Phosphoprotein 65 recombinant, *E. coli*

Cat. No.	Amount
PR-1251-1	1 mg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 50 mM Tris-HCl pH 8.0, 60 mM NaCl, 10 mM Glutathione, 50% glycerol and 0.125% sarcosyl.

Application

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

Specificity

Immunoreactive with sera of CMV-infected individuals.

Molecular Weight

52.2 kDa

Purity

>95% by SDS-PAGE

Description

The protein contains the CMV pp65 immunodominant regions, amino acids 297-510.

The protein is purified by proprietary chromatographic technique.

Background

Human cytomegalovirus (HCMV), a member of the herpesvirus family, demonstrates cell specificity for virus assembly and release.

pp65 (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.

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, soluble mediator-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.