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Antibody Datasheet

Product Name:	Mouse anti	Cytomegalovirus	phosphoprotein	65 (pp65)

Clone number: 0885

Isotype: Mouse IgG1

- Product code: MAB12188-100
- **Batch Number:**
- Amount: 0.1mg
- **Concentration:** 1 mg/ml
- Buffer: Phosphate Buffered Saline pH7.2
- Preservative: 0.09% Sodium Azide (NaN₃)
- Purification: The antibody was purified by affinity chromatography on protein A

Specificity: This antibody is specific for Cytomegalovirus. The antibody recognises HCMV tegument phosphoprotein 65.

Applications: IFA (indirect), WB

Antigen background: Human Cytomegalovirus (HCMV) is an enveloped, double stranded DNA virus that belongs to the family *Herpesviridae*. The human CMV virus is ubiquitous and HCMV infection is globally widespread. The virus can be transmitted through direct contact with infected bodily fluids or though contact with virus infected transplant and transfusion material. Human CMV can also be transferred *in utero* from mother to foetus during pregnancy resulting in congenital HCMV infection of the newborn.

Individuals can be re-infected by the same strain or by a different strain of HCMV. Once infected the virus remains latent in an individual and may reactivate later in life. In developed countries, 50 to 70% of all adults are thought to be HCMV sero-positive.





Reports suggest that HCMV sero-prevalence increases with age, ethnicity, low socioeconomic status and sexuality.

In healthy adults and children, HCMV infection is self-limiting with most cases being asymptomatic or presenting with mild, non-specific or mononucleosis-like symptoms. However, HCMV can cause severe clinical disease in immunocompromised patients. Congenital HCMV infection can lead to birth defects such as blindness, deafness, mental impairment, epilepsy and microcephaly.

Human CMV is composed of a capsid containing the DNA genome, a tegument layer, and an envelope. It has the largest genome of any known human virus encoding numerous glycoproteins. HCMV proteins, localised in the tegument, play important roles in all stages of the viral life cycle and are potential targets for antiviral therapy. The phosphoprotein 65 (pp65) encode by HCMV UL83, is the most abundant tegument protein and a major component of HCMV virions. Pp65 is a target of the host's immune response and is responsible for modulating the host immune response to HMCV during an infection (Tomtishen, JP).

References:Burke HG, Heldwein EE. (2015). Crystal Structure of the Human Cytomegalovirus
Glycoprotein B. PLoS Pathog. Oct 20;11(10):e1005227.

Tomtishen JP 3rd. (2012). Human cytomegalovirus tegument proteins (pp65, pp71, pp150, pp28). Virol J. 2012 Jan 17;9:22.

Storage: Store at $+4^{\circ}$ C for up to three months, or at -20° C for longer.

The Antibody is shipped at ambient temperature. Avoid repeated freeze/thaw cycles.

