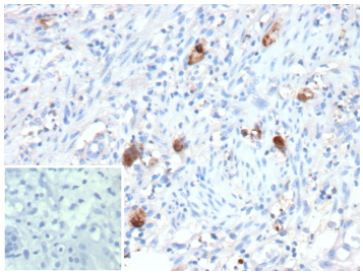
Phosphoprotein 65 Antibody / UL83 [clone rCMV/12688] (V6053)

Catalog No.	Formulation	Size
V6053-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6053-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V6053SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	CMV
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rCMV/12688
UniProt	P06725
Localization	Host cytoplasm, Host nucleus, Virion tegument
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Phosphoprotein 65/UL83 antibody is available for research use only.



Immunohistochemistry of Phosphoprotein 65 antibody in human CMV-infected tissue. FFPE human cytomegalovirus-infected tissue demonstrates focal cytoplasmic HRP-DAB brown staining in scattered infected cells, consistent with UL83 / pp65 expression during active viral infection. Clone rCMV/12688, a recombinant mouse monoclonal antibody, was used for detection. An inset image shows PBS substituted for the primary antibody as a negative control, confirming absence of specific staining. Heat-induced epitope retrieval was performed by heating sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 45 minutes at 95oC followed by cooling at room temperature for 20 minutes prior to staining.

Description

Phosphoprotein 65 antibody recognizes UL83, also known as pp65, Human cytomegalovirus phosphoprotein 65, and Major Tegument Protein, a highly abundant structural component of Human cytomegalovirus virions. Phosphoprotein 65 Antibody targets one of the most immunodominant viral proteins expressed during active HCMV infection and packaged within the viral tegument layer. As the UL83 gene product, pp65 serves as both a structural virion protein and a regulator

of host immune responses.

The UL83 gene encodes a lower matrix phosphoprotein that localizes primarily to the cytoplasm of infected cells, with early nuclear trafficking observed shortly after viral entry. As a tegument-associated protein, pp65 is delivered into host cells during infection and participates in modulation of innate immune signaling pathways, including interference with interferon-mediated antiviral responses. This activity contributes to viral immune evasion and supports efficient viral replication.

Phosphoprotein 65 is abundantly expressed during lytic infection and is widely used as a biomarker for active cytomegalovirus replication in research applications. Because of its strong immunogenicity, pp65 is a dominant antigen recognized by cytotoxic T lymphocytes in infected individuals. Its high expression levels and structural role in virion assembly make UL83 a preferred target for detection of HCMV-infected cells in experimental systems studying viral pathogenesis and host-virus interactions.

The UL83 protein is conserved across clinical HCMV isolates and remains central to investigations of transplant-associated CMV reactivation, congenital infection, and viral persistence in immunocompromised populations. Detection of pp65 expression assists in characterizing infection dynamics and evaluating antiviral strategies in laboratory models.

Clone rCMV/12688 is a recombinant mouse monoclonal antibody that recognizes UL83 / Phosphoprotein 65 and supports research applications focused on cytomegalovirus detection, viral replication studies, and immune response characterization.

Application Notes

1. Optimal dilution of the Phosphoprotein 65/UL83 antibody should be determined by the researcher.

2. This Phosphoprotein 65/UL83 antibody is recombinantly produced by expression in CHO cells.

Immunogen

Prokaryotic recombinant protein corresponding to a region at the C-terminal end of the cytomegalovirus pp65 molecule was used as the immunogen for the Phosphoprotein 65/UL83 antibody.

Storage

Phosphoprotein 65/UL83 antibody with sodium azide - store at 2 to 8oC