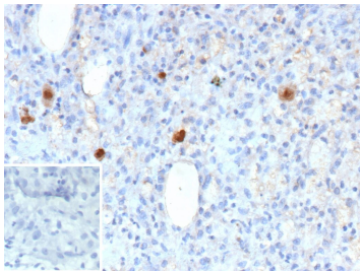
HCMV pp65 Antibody / UL83 [clone r6] (V6050)

Catalog No.	Formulation	Size
V6050-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6050-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V6050SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

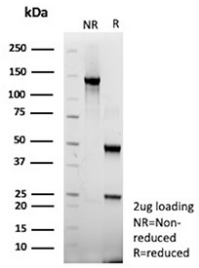
Recombinant MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	CMV
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	r6
UniProt	P06725
Localization	Host cytoplasm, Host nucleus, Virion tegument
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This HCMV pp65/UL83 antibody is available for research use only.



Immunohistochemistry of HCMV pp65 antibody in human CMV-infected tissue. FFPE human cytomegalovirus-infected tissue shows distinct cytoplasmic HRP-DAB brown staining in scattered infected cells against a background of hematoxylin-stained nuclei, consistent with UL83 / pp65 expression in virally infected cells. Clone r6, 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.



SDS-PAGE Analysis of Purified HCMV pp65/UL83 antibody (clone r6). Confirmation of Purity and Integrity of Antibody.

Description

HCMV pp65 antibody recognizes UL83, also known as Human cytomegalovirus phosphoprotein 65, a major tegument protein of Human cytomegalovirus that plays a central role in viral replication, immune modulation, and virion assembly. HCMV pp65 Antibody targets one of the most abundant structural proteins packaged within the viral tegument layer and is widely used as a marker of active HCMV infection in research settings.

UL83 encodes pp65, a highly immunogenic phosphoprotein that accumulates in the cytoplasm of infected cells during early and late stages of viral replication. Following infection, pp65 is delivered into host cells as part of the incoming virion and rapidly traffics to the nucleus before redistributing to the cytoplasm during viral assembly. As a major tegument protein, pp65 contributes to viral particle maturation and regulates host immune responses, including modulation of interferon signaling and antigen presentation pathways.

The UL83 gene is conserved among clinical isolates of HCMV and is frequently used as a diagnostic and research biomarker due to the proteinÃ¢Â€Â™s abundance and strong immunogenicity. In infected tissues, pp65 is typically detected within cytoplasmic and perinuclear compartments of infected epithelial, endothelial, and fibroblast populations. Its high expression level makes it a preferred target for immunohistochemical and immunoblot-based detection of HCMV infection in experimental systems.

Because pp65 is a dominant antigen recognized by cytotoxic T lymphocytes, it plays a key role in shaping host adaptive immune responses during primary infection and viral reactivation. Altered pp65 expression patterns have been associated with viral latency, immune evasion strategies, and disease progression in immunocompromised individuals. These characteristics position UL83 as both a structural virion component and an immunomodulatory viral factor.

Clone r6 is a recombinant mouse monoclonal antibody that recognizes HCMV pp65 and supports research applications focused on viral detection, host-virus interaction studies, and characterization of cytomegalovirus infection models.

Application Notes

Optimal dilution of the HCMV pp65/UL83 antibody should be determined by the researcher.

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 HCMV pp65/UL83 antibody.

Storage

HCMV pp65/UL83 antibody with sodium azide - store at 2 to 8oC