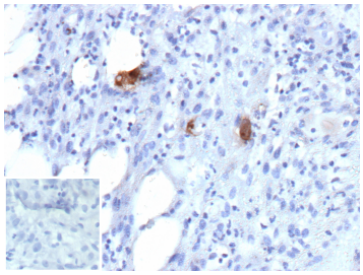
UL83 Antibody / Major Tegument Protein [clone r2] (V6052)

Catalog No.	Formulation	Size
V6052-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6052-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V6052SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

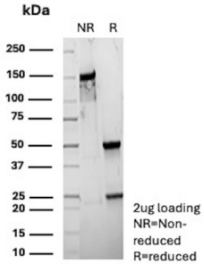
Recombinant MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	CMV
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	r2
UniProt	P06725
Localization	Host cytoplasm, Host nucleus, Virion tegument
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This UL83/Major Tegument Protein antibody is available for research use only.



Immunohistochemistry of UL83 antibody in human CMV-infected tissue. FFPE human cytomegalovirus-infected tissue shows focal cytoplasmic HRP-DAB brown staining in scattered infected cells, consistent with Major Tegument Protein / pp65 expression in virally infected cells. Clone r2, 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 UL83/Major Tegument Protein antibody (clone r2). Confirmation of Purity and Integrity of Antibody.

Description

UL83 antibody recognizes Major Tegument Protein, also known as pp65 or Human cytomegalovirus phosphoprotein 65, a highly abundant structural component of Human cytomegalovirus virions. UL83 Antibody targets the viral gene product that encodes pp65, one of the most immunodominant and extensively studied proteins of HCMV. As the principal tegument protein, pp65 is packaged within the viral particle and delivered into host cells immediately upon infection.

The UL83 gene encodes a lower matrix phosphoprotein that localizes predominantly to the cytoplasm of infected cells, with early nuclear trafficking observed following viral entry. As a Major Tegument Protein, pp65 plays a critical role in virion assembly, structural stabilization, and modulation of host antiviral defenses. It participates in regulation of innate immune signaling pathways and has been shown to interfere with interferon-mediated responses, facilitating viral persistence and immune evasion.

Major Tegument Protein expression is robust during both early and late phases of infection, making it a reliable marker of active viral replication. Because pp65 is abundantly expressed and strongly immunogenic, it is frequently used in research applications investigating cytomegalovirus pathogenesis, transplant-associated CMV reactivation, and host immune responses. Detection of UL83 expression assists in characterizing viral replication kinetics, evaluating antiviral strategies, and studying virus-host interactions in experimental systems.

The UL83 gene is conserved across clinical HCMV isolates, and pp65 remains one of the most recognized antigens by cytotoxic T lymphocytes during natural infection. Its structural and immunological significance positions Major Tegument Protein at the intersection of viral assembly and adaptive immune recognition.

Clone r2 is a recombinant mouse monoclonal antibody that recognizes UL83 / Major Tegument Protein and is suitable for detection of HCMV pp65 expression in controlled research applications focused on viral structure and infection biology.

Application Notes

Optimal dilution of the UL83/Major Tegument Protein 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 UL83/Major Tegument Protein antibody.

Storage

UL83/Major Tegument Protein antibody with sodium azide - store at 2 to 8oC