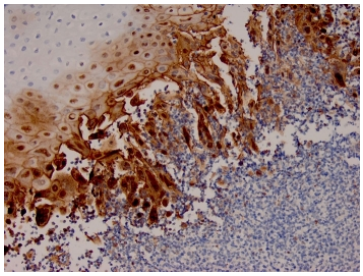
HSV1 Antibody Recombinant Rabbit MAb / Herpes Simplex Virus Type I [clone HSV1/4055R] (V8925)

Catalog No.	Formulation	Size
V8925-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8925-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8925SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

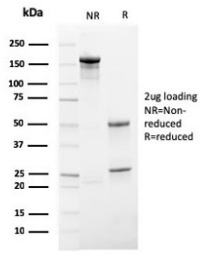
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	HSV1 (Herpes Simplex Virus 1)
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	HSV1/4055R
Purity	Protein A affinity
UniProt	Not Applicable
Localization	Cytoplasmic, Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This HSV1 antibody is available for research use only.



Immunohistochemistry of HSV1 antibody in human esophageal carcinoma tissue. FFPE human esophageal carcinoma sections were subjected to heat-induced epitope retrieval by boiling in pH 9, 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to staining. The recombinant rabbit monoclonal HSV1 antibody clone HSV1/4055R was used as the detecting antibody. HRP-DAB brown staining is observed predominantly in tumor epithelial cells, with signal localized to the nucleus and cytoplasm of positive cells, while surrounding stromal elements and adjacent non-neoplastic areas show comparatively reduced background staining. The staining pattern is consistent with Herpes simplex virus type 1 antigen expression in carcinoma tissue.



SDS-PAGE analysis of purified, BSA-free HSV1 antibody (clone HSV1/4055R) as confirmation of integrity and purity.

Description

HSV1 antibody recombinant rabbit mAb recognizes Herpes simplex virus type 1, an enveloped double stranded DNA virus classified within the Alphaherpesvirinae subfamily of the Herpesviridae family. HSV1 antibody, also referred to as Herpes simplex virus 1 antibody and HSV-1 antibody in the literature, detects viral antigens expressed during active infection and viral reactivation. This recombinant rabbit monoclonal antibody provides defined, high-affinity detection of HSV-1 proteins in infected cells and tissues.

Herpes simplex virus type 1 primarily infects epithelial cells of the oral and facial mucosa and subsequently establishes lifelong latency in sensory neurons, particularly within the trigeminal ganglia. During lytic infection, HSV-1 expresses immediate early, early, and late proteins that regulate viral transcription, genome replication, and virion assembly. Reactivation from latency leads to renewed viral protein synthesis and anterograde transport back to peripheral tissues, producing recurrent lesions. Detection of HSV-1 antigen expression is therefore essential for studying viral replication, latency, and reactivation models.

The HSV-1 genome encodes numerous structural and regulatory proteins, including envelope glycoproteins such as gB, gC, gD, and gE, as well as transcriptional regulators that localize primarily to the nucleus during replication. Viral antigens may exhibit nuclear, cytoplasmic, or membranous distribution depending on the stage of infection. Clone HSV1/4055R recognizes HSV-1 antigens and supports consistent monoclonal detection of viral protein expression in research settings.

HSV-1 infection is associated with orolabial lesions, keratitis, encephalitis, and increased risk of severe disease in immunocompromised individuals. In laboratory systems, HSV-1 is widely used to investigate viral latency, neuronal tropism, immune evasion mechanisms, and antiviral therapeutic development. A recombinant rabbit monoclonal format offers defined specificity and lot-to-lot consistency, supporting reproducible experimental design.

HSV1 antibody recombinant rabbit mAb (clone HSV1/4055R) is suitable for research applications focused on viral detection, host-pathogen interactions, and molecular analysis of Herpes simplex virus type 1 biology.

Application Notes

Optimal dilution of the HSV1 antibody should be determined by the researcher.

Immunogen

Detergent-solubilized herpes simplex virus (HSV) type 1 infected cells were used as the immunogen for the HSV1 antibody.

Storage

Aliquot the HSV1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.