

Rabbit Anti-EBV LMP2A antibody

SL4700R

Product Name:	EBV LMP2A
Chinese Name:	EB病毒LMP-2A蛋白抗体
Alias:	EBV latent membrane protein 2A; Epstein Barr virus; HHV4; Human Herpesvirus 4; Latent membrane protein 2; LMP2; Terminal protein; LMP2A; LMP2 EBVB9.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	HHV4t2
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from HHV4t2 LMP2A:401-497/497
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Epstein Barr virus (EBV) is a member of the herpesvirus family and one of the most common human viruses. Most people become infected with EBV during their lives. Primary infections usually results in infectious mononucleosis (glandular fever) but the virus can also lay dormant in B lymphocytes and when reactivated become associated with more serious disease such as Burkitt's lymphoma, nasopharyngeal carcinoma and Hodgkin's disease. EBV latently infects B lymphocytes. Infected B cells express EBV nuclear antigens and latent proteins LMP1, LMP2A and LMP2B. LMP2A forms

aggregates in the plasma membranes of B lymphocytes, where it functions as a negative regulator of the Src and Syk protein tyrosine kinases. Studies show that LMP2A blocks B-cell receptor (BCR) signal transduction in EBV immortalized B cells in vitro and may play an important role in maintaining a latent EBV infection within the peripheral blood B cells of infected individuals.

Function:

Isoform LMP2A maintains EBV latent infection of B-lymphocyte, by preventing lytic reactivation of the virus in response to surface immunoglobulin (sIg) cross-linking. Acts like a dominant negative inhibitor of the sIg-associated protein tyrosine kinases, LYN and SYK. Also blocks translocation of the B-cell antigen receptor (BCR) into lipid rafts, preventing the subsequent signaling and accelerated internalization of the BCR upon BCR cross-linking. Serves as a molecular scaffold to recruit SYK, LYN and E3 protein-ubiquitin ligases, such as ITCH and NEDD4L, leading to ubiquitination and potential degradation of both tyrosines kinases. Possesses a constitutive signaling activity in non-transformed cells, inducing bypass of normal B lymphocyte developmental checkpoints allowing immunoglobulin-negative cells to colonize peripheral lymphoid organs.

Isoform LMP2B may be a negative regulator of isoform LMP2A.

Subunit:

Isoform LMP2A cytoplasmic N-terminal domain interacts with human SRC family protein tyrosine kinases SYK and LYN. Binds human ITCH, WWP2 and NEDD4L.

Subcellular Location:

Isoform LMP2A: Host cell membrane; Multi-pass membrane protein. Note=Isoform LMP2A is localized in plasma membrane lipid rafts.

Isoform LMP2B: Host endomembrane system; Multi-pass membrane protein. Host cytoplasm, host perinuclear region. Note=Isoform LMP2B localizes to perinuclear regions.

Post-translational modifications:

Can be ubiquitinated by human ITCH and WWP2 on the N-terminus in a lysine-independent manner.

Similarity:

Belongs to the herpesviridae LMP-2 family.

SWISS:

P13285

Gene ID:

N/A

Database links:

Important Note:
This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.

