

AM01314PU-N**Monoclonal Antibody to Epstein Barr Virus / EBV LMP2A - Purified****Alternate names:** HHV-4, HHV4**Quantity:** 0.25 mg**Concentration:** 1.0 mg/ml

Background: EBV is a human herpesvirus, which is associated with conditions such as Hodgkins disease and Burkitts Lymphoma and is the causative agent in mononucleosis in adolescents. 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. Clone 14B7 detects wild-type LMP2A protein.

Host / Isotype: Rat / IgG2a**Recommended Isotype Controls:** SM15P, SM15PX**Clone:** 14B7

Immunogen: Bacterial TrpE-LMP2A fusion protein. Spleen cells from immunised Lou/C rats were fused with cells of the P3X63.Ag8.653 myeloma cell line.

Format: **State:** Liquid purified Ig
Purification: Affinity chromatography on Protein G
Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide

Applications: Immunoprecipitation.
Immunofluorescence.
Western Blot: 1/100 - 1/1000.
Not suitable for paraffin sections.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognises latent membrane protein 2A (LMP2A) of Epstein-Barr virus (EBV).

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Fruehling S, Lee SK, Herrold R, Frech B, Laux G, Kremmer E, et al. Identification of latent membrane protein 2A (LMP2A) domains essential for the LMP2A dominant-negative effect on B-lymphocyte surface immunoglobulin signal transduction. J Virol. 1996 Sep;70(9):6216-26. PubMed PMID: 8709248.
2. Fruehling S, Swart R, Dolwick KM, Kremmer E, Longnecker R. Tyrosine 112 of latent

membrane protein 2A is essential for protein tyrosine kinase loading and regulation of Epstein-Barr virus latency. J Virol. 1998 Oct;72(10):7796-806. PubMed PMID: 9733815.