



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rat Anti-Epstein-Barr Virus LMP2A

With HRP-conjugated Secondary Antibody

Catalog No.
DS-MB-03626

Target Species
Viral

Isotype
IgG2a

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Immunogen: Bacterial TrpE-LMP2A fusion protein

Fusion Partners: Spleen cells from immunized Lou/C rats were fused with cells of the P3X63.Ag8.653 myeloma cell line.

Formulation

Product Form: Purified IgG - liquid

Product Type: Monoclonal Antibody

Buffer Solution: Phosphate buffered saline

Preservative Stabilizers: 0.09% Sodium Azide (NaN₃)

Approx. Protein Concentrations: IgG concentration 1.0 mg/ml

Specificity

This product recognises latent membrane protein 2A (LMP2A) of Epstein-Barr virus (EBV). EBV is a human herpes virus, which is associated with conditions such as Hodgkin's disease and Burkitt's 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.

DS-MB-03626 detects wild-type LMP2A protein.

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life: 18 months from date of dispatch.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Applications

| Options / Functions | YES | NO | Not determined | Recommended Work dilution or concentration |
|----------------------------|-----|----|----------------|--|
| Flow Cytometry | | | • | |
| Immunohistology - Frozen | | | • | |
| Immunohistology – Paraffin | | • | | |
| Immunoprecipitation | • | | | |
| Immunofluorescence | • | | | |
| Western Blotting | • | | | 1/100 - 1/1000 |
| Elisa | | | • | |

Note: Other applications have not been tested. Optimal dilutions should be determined.

Secondary Antibody Applications

| Options / Functions | YES | NO | Not determined | Recommended Work dilution or concentration |
|-----------------------------------|-----|----|----------------|--|
| Immunoassay (ELISA, Western blot) | • | | | 1:5000-1:10000 |

References

1. Fruehling, S. *et al.* (1996) Identification of latent membrane protein 2A (LMP2A) domains essential for the LMP2A dominant-negative effect on B-lymphocyte surface immunoglobulin signal transduction. *J Virol.* 70:6216 – 6226.
2. Fruehling, S. *et al.* (1998) Tyrosine 112 of latent membrane protein 2A is essential for protein tyrosine kinase loading and regulation of Epstein-Barr virus latency. *J Virol.* 72:7796 – 7806.

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