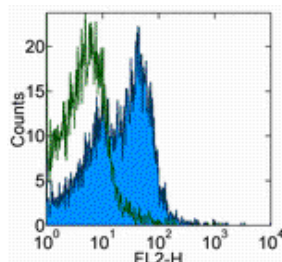


## Anti-Mouse Integrin alpha 4 beta 7 (LPAM-1) Functional Grade Purified

**Catalog Number:** 16-5887

**RUO: For Research Use Only. Not for use in diagnostic procedures.**



Staining of C57Bl/6 splenocytes with 0.5 ug of Rat IgG2a Isotype Control Purified (cat. 14-4321) (open histogram) or 0.5 ug of Anti-Mouse Integrin alpha 4 beta 7 (LPAM-1) Purified (filled histogram) followed by Anti-Rat IgG Biotin (cat. 13-4813) and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Mouse Integrin alpha 4 beta 7 (LPAM-1)  
Functional Grade Purified

**REF** **Catalog Number:** 16-5887

**Clone:** DATK32 (DATK-32)

**Concentration:** 1 mg/mL

**Host/Isotype:** Rat IgG2a, kappa

**Handling Conditions:** Use in sterile environment.

**Endotoxin Level:** Less than 0.001 ng/ug antibody, as determined by the LAL assay.

**Formulation:** aqueous buffer, no sodium azide



**Temperature Limitation:** Store at 2-8°C.



**Batch Code:** Refer to Vial



**Use By:** Refer to Vial

### Description

The DATK32 monoclonal antibody binds to a combinatorial epitope of mouse LPAM-1 ( $\alpha_4\beta_7$ ), which is a heterodimer of the the 154 kDa  $\alpha_4$  subunit and the 130 kDa  $\beta_7$  subunit. In mouse, the  $\beta_7$  subunit is found on the majority of mature lymphocytes and a small population of thymocytes and bone marrow cells. LPAM-1 is an integrin involved in the transendothelial migration of lymphocytes across high endothelial venules (HEV), and is known to bind several ligands including MAdCAM-1, VCAM-1 and fibronectin. Binding of the DATK32 monoclonal antibody has been shown to induce aggregation of the CD8+ T cell lymphoma TK1, and block LPAM-1-mediated cell adhesion.

### Applications Reported

This DATK32 (DATK-32) antibody has been reported for use in flow cytometric analysis.

### Applications Tested

This DATK32 (DATK-32) antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Berlin C, Berg EL, Briskin MJ, Andrew DP, Kilshaw PJ, Holzmann B, Weissman IL, Hamann A, Butcher EC. Alpha 4 beta 7 integrin mediates lymphocyte binding to the mucosal vascular addressin MAdCAM-1. *Cell*. 1993 Jul 16;74(1):185-95. (DATK32, FC, FA, PubMed)

Andrew DP, Berlin C, Honda S, Yoshino T, Hamann A, Holzmann B, Kilshaw PJ, Butcher EC. Distinct but overlapping epitopes are involved in alpha 4 beta 7-mediated adhesion to vascular cell adhesion molecule-1, mucosal addressin-1, fibronectin, and lymphocyte aggregation. *J Immunol*. 1994 Nov 1;153(9):3847-61. (DATK32, FC, FA, PubMed)

Hamann A, Andrew DP, Jablonski-Westrich D, Holzmann B, Butcher EC. Role of alpha 4-integrins in lymphocyte homing to mucosal tissues in vivo. *J Immunol*. 1994 Apr 1;152(7):3282-93. (DATK32, FC, FA, PubMed)

### Related Products

12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4321 Rat IgG2a K Isotype Control Purified (eBR2a)

16-4321 Rat IgG2a K Isotype Control Functional Grade Purified (eBR2a)

---

Not for further distribution without written consent.

Copyright © 2000-2012 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • [www.eBioscience.com](http://www.eBioscience.com) • [info@eBioscience.com](mailto:info@eBioscience.com)