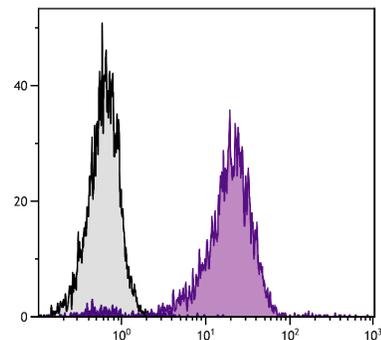




## Rat Anti-Mouse LPAM-1

Cat. No.	Format	Size
1870-01	Purified (UNLB)	0.5 mg
1870-08	Biotin (BIOT)	0.5 mg
1870-09	R-phycoerythrin (PE)	0.1 mg
1870-09L	R-phycoerythrin (PE)	0.2 mg
1870-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg



AKR/Cum mouse T lymphocyte cell line TK-1 was stained with Rat Anti-Mouse LPAM-1-BIOT (SB Cat. No. 1870-08) followed by Streptavidin-PE (SB Cat. No. 7100-09).

### Overview

<b>Clone</b>	DATK32
<b>Isotype</b>	Rat (Fischer) IgG <sub>2aκ</sub>
<b>Immunogen</b>	AKR/Cum mouse T lymphoma cell line TK-1
<b>Specificity</b>	Mouse LPAM-1
<b>Alternate Name(s)</b>	Integrin $\alpha_4\beta_7$ , lymphocyte Peyer's patch adhesion molecule

### Description

The lymphocyte Peyer's patch adhesion molecule (LPAM-1), also known as integrin  $\alpha_4\beta_7$ , is a member of the integrin family of cell surface receptors. It is expressed primarily on mucosal lymphocytes but is also present on NK cells and eosinophils. The  $\alpha_4\beta_7$  heterodimer mediates the binding of lymphocytes to its ligand, mucosal vascular addressin (MAdCAM-1) on the high endothelial venules, thereby directing the homing of lymphocytes into Peyer's patches and intestinal lamina propria. The monoclonal antibody DATK32 recognizes a conformational epitope on the heterodimer.

### Applications

FC – Quality tested <sup>1,3-5</sup>  
 IHC-FS – Reported in literature <sup>4</sup>  
 Block – Reported in literature <sup>1-3</sup>  
 IP – Reported in literature <sup>4</sup>

### Working Dilutions

<b>Flow Cytometry</b>	Purified (UNLB) antibody	$\leq 1 \mu\text{g}/10^6$ cells
	BIOT conjugate	$\leq 1 \mu\text{g}/10^6$ cells
	PE conjugate	$\leq 0.1 \mu\text{g}/10^6$ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 $\mu\text{L}$	

**Other Applications** Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

## Handling and Storage

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- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

## Warning

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Some reagents contain sodium azide. Please refer to product specific SDS.

## References

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1. Andrew DP, Berlin C, Honda S, Yoshino T, Hamann A, Holzmann B, et al. 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;153:3847-61. (Immunogen, FC, Block)
2. Berlin C, Berg EL, Briskin MJ, Andrew DP, Kilshaw PJ, Holzmann B, et al.  $\alpha_4\beta_7$  integrin mediates lymphocyte binding to the mucosal vascular addressin MAdCAM-1. *Cell.* 1993;74:185-95. (Block)
3. Katayama Y, Hidalgo A, Peired A, Frenette PS. Integrin  $\alpha_4\beta_7$  and its counterreceptor MAdCAM-1 contribute to hematopoietic progenitor recruitment into bone marrow following transplantation. *Blood.* 2004;104:2020-26. (Block, FC)
4. Bogetto L, Gabriele E, Cariatì R, Dolcetti R, Spresotto P, Doglioni C, et al. Bidirectional induction of the cognate receptor-ligand  $\alpha_4$ -VCAM-1 pair defines a novel mechanism of tumor intravasation. *Blood.* 2000;95:2397-406. (FC, IP, IHC-FS)
5. Seo G, Jang Y, Kim H, Lee M, Park M, Park S, et al. Retinoic acid, acting as a highly specific IgA isotype switch factor, cooperates with TGF- $\beta$ 1 to enhance the overall IgA response. *J Leukoc Biol.* 2013;94:325-35. (FC)