

Technical Data Sheet

PE Rat Anti-Mouse LPAM-1

Product Information

Material Number:	553811
Alternate Name:	Integrin $\alpha 4\beta 7$ complex
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	DATK32
Immunogen:	AKR/Cum mouse T lymphoma line TK1
Isotype:	Rat (F344) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The DATK32 antibody reacts with an epitope specific to the $\alpha 4\beta 7$ integrin heterodimer. $\alpha 4\beta 7$ (LPAM-1) is expressed on most mature lymphocytes and on small subsets of thymic and bone marrow cells. It interacts with several ligands, including VCAM-1 (CD106), fibronectin, and MAdCAM-1. DATK32 antibody induces $\alpha 4\beta 7$ -dependent lymphocyte aggregation, but it inhibits other $\alpha 4\beta 7$ -mediated lymphocyte adhesion events, including binding to fibronectin, MAdCAM-1, and VCAM-1 (CD106).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Andrew DP, Berlin C, Honda S, 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.* 1194; 153(9):3847-3861.(Immunogen)
 Andrew DP, Rott LS, Kilshaw PJ, Butcher EC. Distribution of alpha 4 beta 7 and alpha E beta 7 integrins on thymocytes, intestinal epithelial lymphocytes and peripheral lymphocytes. *Eur J Immunol.* 1996; 26(4):897-905.(Biology)
 Berlin C, Berg EL, Briskin MJ, et al. Alpha 4 beta 7 integrin mediates lymphocyte binding to the mucosal vascular addressin MAdCAM-1. *Cell.* 1993; 74(1):185-195.(Biology)
 Kilshaw PJ, Murant SJ. Expression and regulation of beta 7(beta p) integrins on mouse lymphocytes: relevance to the mucosal immune system. *Eur J Immunol.* 1991; 21(10):2591-2597.(Biology)

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