Integrin alpha 4 beta 7 (LPAM-1) Monoclonal Antibody (DATK32 (DATK-32)), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	DATK32 (DATK-32)
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_529605

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	5 Publications
Functional Assay (FN)	Assay-Dependent	-

Product Specific Information

Description: The DATK32 monoclonal antibody binds to a combinatorial epitope of mouse LPAM-1 (alpha4beta7), which is a heterodimer of the the 154 kDa alpha4 subunit and the 130 kDa beta7 subunit. In mouse, the beta7 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 know 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. (Please use Functional Grade purified DATK32 (DATK-32), Product # 16-5887 , in functional assays.).

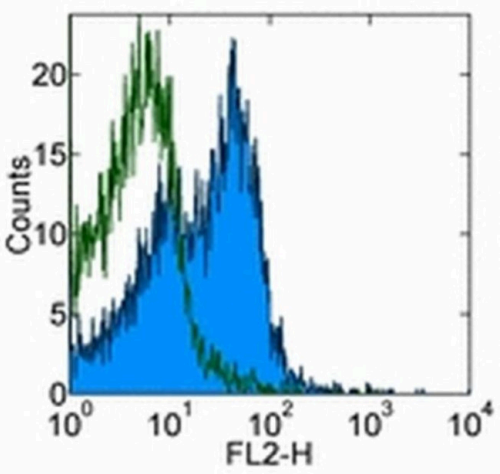
Applications Tested: This DATK32 (DATK-32) antibody has been tested tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number 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.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Integrin alpha 4 beta 7 (LPAM-1) Monoclonal Antibody (DATK32 (DATK-32)), eBioscience™



Integrin alpha 4 beta 7 (LPAM-1) Antibody (14-5887-82) in Flow
Staining of C57BL/6 splenocytes with 0.5 µg of Rat IgG2a kappa Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.5 µg of Anti-Mouse Integrin alpha 4 beta 7 Purified (filled histogram) followed by Anti-Rat IgG Biotin (Product # 13-4813-85) and Streptavidin PE (Product # 12-4317-87).Cells in the lymphocyte gate were used for analysis.

5 References

Flow Cytometry (5)

Cell reports

Redundant cytokine requirement for intestinal microbiota-induced Th17 cell differentiation in draining lymph nodes.

"14-5887-82 was used in Flow Cytometry to show that intestine-draining mesenteric lymph nodes (MLNs), not intestine proper, are the dominant site of SFB-induced intestinal Th17 cell differentiation."

Authors: Sano T,Kageyama T,Fang V,Kedmi R,Martinez CS,Talbot J,Chen A,Cabrera I,Gorshko O,Kurakake R,Yang Y, Ng C,Schwab SR,Littman DR

Year
2021

Species
Mouse

Journal of immunology (Baltimore, Md. : 1950)

A Novel mTORC1-Dependent, Akt-Independent Pathway Differentiates the Gut Tropism of Regulatory and Conventional CD4 T Cells.

"14-5887 was used in Flow cytometry/Cell sorting to provide a framework for how the migratory behaviour of Treg and Tconv might be differentially regulated for therapeutic purposes."

Authors: Chen LC,Nicholson YT,Rosborough BR,Thomson AW,Raimondi G

Year
2016

Species
Mouse

View more Flow references on thermofisher.com

More applications with references on thermofisher.com