

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.

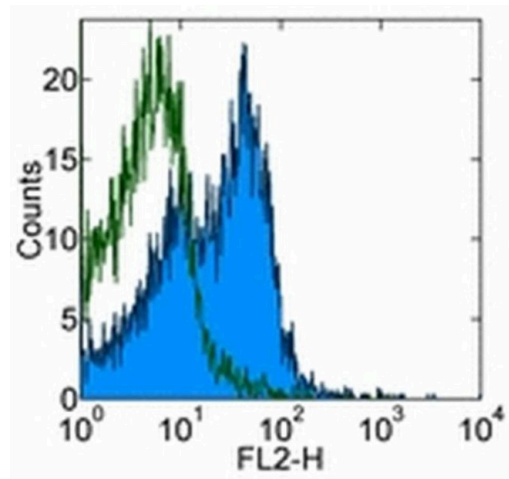
Applications Reported: This DATK32 (DATK-32) antibody has been reported for use in flow cytometric analysis. (Please use Functional Grade purified DATK32 (DATK-32), Product # 16-5887 , in functional assays.).

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 10⁵ to 10⁸ 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.



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)

<p>Cell reports</p> <p>Redundant cytokine requirement for intestinal microbiota-induced Th17 cell differentiation in draining lymph nodes.</p> <p>"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."</p> <p>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</p>	<p>Year 2021</p> <p>Species Mouse</p>
<p>Journal of immunology (Baltimore, Md. : 1950)</p> <p>A Novel mTORC1-Dependent, Akt-Independent Pathway Differentiates the Gut Tropism of Regulatory and Conventional CD4 T Cells.</p> <p>"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."</p> <p>Authors: Chen LC, Nicholson YT, Rosborough BR, Thomson AW, Raimondi G</p>	<p>Year 2016</p> <p>Species Mouse</p>

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.