# CD49d (Integrin alpha 4) Monoclonal Antibody (R1-2), PE-Cyanine7, eBioscience™

### **Product Details**

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Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), PE-Cyanine7, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	R1-2
Conjugate	PE-Cyanine7
Excitation/Emission Max	569/780 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2811776

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	2 Publications

### **Product Specific Information**

Description: The R1-2 monoclonal antibody reacts with mouse CD49d, the 150 kDa integrin alpha4 subunit. The complex of CD49d non-covalently associated with integrin beta1 (CD29), also known as VLA-4, is a receptor for fibronectin and VCAM-1 (CD106). This complex is expressed by thymocytes, peripheral lymphocytes, monocytes and eosinophils. CD49d also associates with integrin b7 and binds to the Mucosal vascular Addressin (MAdCAM-1).^M

Applications Reported: This R1-2 antibody has been reported for use in flow cytometric analysis.^M

Applications Tested: This R1-2 antibody has been tested by flow cytometric analysis of mouse splenocytes. This may be used at less than or equal to 0.5  $\mu$ 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.^M

Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.^M

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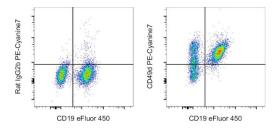
Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.^M

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<sup>∧</sup>M

Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

### Product Images For CD49d (Integrin alpha 4) Monoclonal Antibody (R1-2), PE-Cyanine7, eBioscience™



## CD49d (Integrin alpha 4) Antibody (25-0492-82) in Flow

BALB/c mouse splenocytes were stained with CD19 Monoclonal Antibody, eFluor 450 (Product # 48-0193-82) and 0.25 µg of Rat IgG2b kappa Isotype Control, PE-Cyanine7 (Product # 25-4031-82) (left) or 0.25 µg of CD49b Monoclonal Antibody, PE-Cyanine7 (right). Cells in the lymphocyte gate were used for analysis.

#### View more figures on thermofisher.com

### 2 References

### Flow Cytometry (2)

<sup>iScience</sup> Niche-expressed Galectin-1 is involved in pre-B acute lymphoblastic leukemia relapse through pre-B cell receptor activation.	Year 2023 Species Mouse	
"25-0492-82 was used in Flow cytometry/Cell sorting to show that non-cell autonomous signals transmitted by BM niches represent promising targets to improve B-ALL patient survival."		
Authors: Pelletier J,Balzano M,Destin J,Montersino C,Delahaye MC,Marchand T,Bailly AL,Bardin F,Coppin E,Goubard A,Castellano R,de Bruijn MJW,Rip J,Collette Y,Dubreuil P,Tarte K,Broccardo C,Hendriks RW,Schiff C,Vey N,Aurrand- Lions M,Mancini SJC		
EMBO molecular medicine	<b>Year</b> 2021	
Low immunogenicity of malaria pre-erythrocytic stages can be overcome by vaccination.		

"Published figure using CD49d (Integrin alpha 4) monoclonal antibody (Product # 25-0492-82) in Flow Cytometry"

Authors: Müller K, Gibbins MP, Roberts M, Reyes-Sandoval A, Hill AVS, Draper SJ, Matuschewski K, Silvie O, Hafalla JCR

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