



# CD49b (Integrin alpha 2) Monoclonal Antibody (DX5), PE-Cyanine7, eBioscience™

<b>Product Details</b>	
Size	100 μg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgM, kappa
Class	Monoclonal
Туре	Antibody
Clone	DX5
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_469667

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 μg/test	21 Publications
Functional Assay (FN)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

#### **Product Specific Information**

Description: The DX5 monoclonal antibody reacts with CD49b, an antigen expressed on a majority of mouse natural killer cells and a subset of T cells. DX5 reacts with all strains of mouse tested including the most commonly used strains, BALB/c, C57BL/6, C3H, CBA, DBA, AKR, SJL and 129. Simultaneous staining of C57BL/6 spleen cells with anti-NK1.1 mAb (PK136) and DX5 reveals coexpression of both markers by a majority of cells as well as presence of small populations of DX5+PK136- and DX5-PK136+ cells.

Applications Reported: This DX5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This DX5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can 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.

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

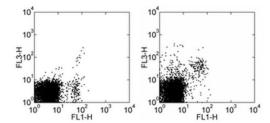
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L cell sample + 100  $\mu$ L IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific

performance should be determined empirically.

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

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For CD49b (Integrin alpha 2) Monoclonal Antibody (DX5), PE-Cyanine7, eBioscience™



CD49b (Integrin alpha 2) Antibody (25-5971-82) in Flow Staining of C57BL/6 splenocytes with Anti-Mouse NK1-1 FITC (Product # 11-5941-82) and staining buffer (autofluorescence) (left) or 0.25  $\mu$ g of Anti-Mouse CD49b (Integrin alpha 2) PE-Cyanine7 (right). Total viable cells were used for analysis.

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#### □ 23 References

#### Flow Cytometry (21)

Journal for immunotherapy of cancer

Ultrasound combined with nanobubbles promotes systemic anticancer immunity and augments anti-PD1 efficacy.

"25-5971-82 was used in Flow Cytometry to provide a promising strategy for sensitizing poorly immunogenic solid tumors to immunotherapy in the clinic."

Authors: Hu J,He J,Wang Y,Zhao Y,Fang K,Dong Y,Chen Y,Zhang Y,Zhang C,Wang H,Tan J,Wang J,Zi R,Liu C,Liang H,Guo Y,Ou J

**Year** 2022

Species Mouse

#### **iScience**

Immunogenicity and protective efficacy of an intranasal live-attenuated vaccine against SARS-CoV-2.

"25-5971-82 was used in Flow Cytometry to evaluate a Newcastle disease virus (NDV)-based vectored-vaccine in mice and hamsters for its immunogenicity, safety and protective efficacy against SARS-CoV-2."

Authors: Park JG,Oladunni FS,Rohaim MA,Whittingham-Dowd J,Tollitt J,Hodges MDJ,Fathallah N,Assas MB,Alhazmi W,Almilaibary A,Iqbal M,Chang P,Escalona R,Shivanna V,Torrelles JB,Worthington JJ,Jackson-Jones LH,Martinez-Sobrido L,Munir M

**Year** 2021

Species Mouse

View more Flow references on thermofisher.com

#### **Functional Assay (1)**

Journal of leukocyte biology

Phenotypic differences between Th1 and Th17 cells and negative regulation of Th1 cell differentiation by IL-17.

"25-5971 was used in Functional assays to compare the cell surface marker expression profiles of Th1 and Th17 cells."

Authors: Nakae S.Iwakura Y.Suto H.Galli SJ

**Year** 2007

Species Mouse

### Miscellaneous PubMed (1)

Journal of immunology (Baltimore, Md.: 1950)

Chronic helminth infection promotes immune regulation in vivo through dominance of CD11cloCD103- dendritic cells.

"25-5971 was used in Magnetic cell separation to identify that the preferential expansion of a novel population of CD11c (lo) non-plasmacytoid DCs is associated with the pro-regulatory environment of chronic intestinal helminth infection."

 $\label{lem:conditional} Authors: Smith KA, Hochweller K, H\"{a}mmerling GJ, Boon L, MacDonald AS, Maizels RM$ 

**Year** 2011

Species Mouse

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