

CD45 Monoclonal Antibody (2D1), eFluor™ 450, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Non-human primate, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor™ 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2D1
Conjugate	eFluor™ 450
Excitation/Emission Max	405/445 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_1603240

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	21 Publications

Product Specific Information

Description: The 2D1 monoclonal antibody reacts with all isoforms of human CD45, also known as Leukocyte Common Antigen (LCA). CD45 is expressed by all hematopoietic cells excluding circulating erythrocytes and platelets. The cytoplasmic portion of CD45 has tyrosine phosphatase enzymatic activity and plays an important role in activation of lymphocytes.

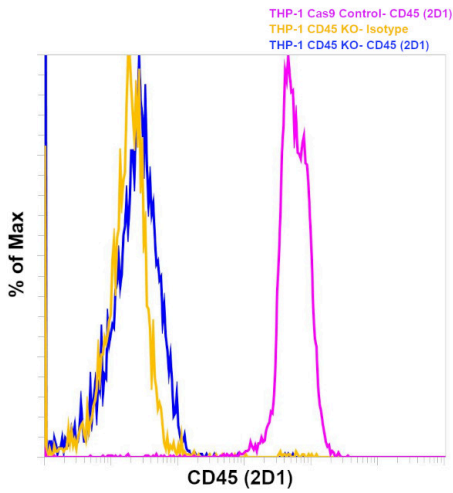
Applications Reported: This 2D1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 2D1 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.25 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.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

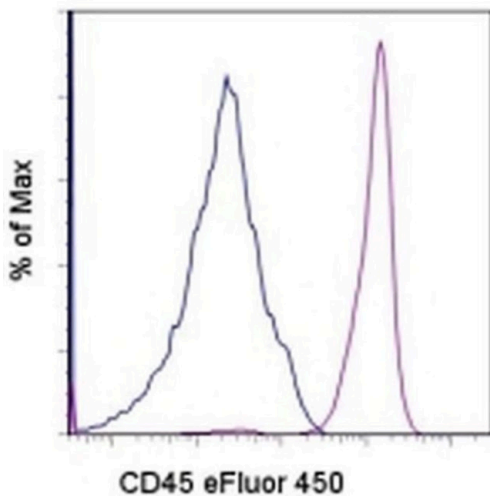
Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.



CD45 Antibody (48-9459-42)

Antibody clone (2D1) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in 2D1 KO cells (blue histogram) compared to the control Cas9 cells (pink histogram) using CD45 antibody (2D1). Yellow histogram represents staining with the isotype control. {KO}



CD45 Antibody (48-9459-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control eFluor® 450 (Product # 48-4714-82) (blue histogram) or Anti-Human CD45 eFluor® 450 (purple histogram). Cells in the lymphocyte gate were used for analysis.

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Flow Cytometry (21)

Odontology

Osteogenic potential of apical papilla stem cells mediated by platelet-rich fibrin and low-level laser.

"Published figure using CD45 monoclonal antibody (Product # 48-9459-42) in Flow Cytometry"

Authors: Ramírez DG, Inostroza C, Rouabhia M, Rodriguez CA, Gómez LA, Losada M, Muñoz AL

Year
2024

International journal of medical sciences

LIM Mineralization Protein-1 Enhances the Committed Differentiation of Dental Pulp Stem Cells through the ERK1/2 and p38 MAPK Pathways and BMP Signaling.

"Published figure using CD45 monoclonal antibody (Product # 48-9459-42) in Flow Cytometry"

Authors: Mu R, Chen B, Bi B, Yu H, Liu J, Li J, He M, Rong L, Liu B, Liu K, Zhu L, Shi X, Shuai Y, Jin L

Year
2022

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More applications with references on thermofisher.cn

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