

CD90.2 (Thy-1.2) Monoclonal Antibody (53-2.1), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	53-2.1
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
Form	Liquid
Concentration	0.2 mg/mL
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_2688080

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.125 µg/test	6 Publications

Product Specific Information

Description: The 53-2.1 monoclonal antibody reacts with mouse CD90.2 also known as Thy-1.2, a GPI-linked membrane molecule. CD90.2 is expressed by mouse thymocytes and mature T cells as well as neurons in CD90.2-expressing mouse strains. These strains include BALB/c, CBA, C3H, C57BL/6, C58/, SJL and others. Cells from CD90.1-expressing strains including PL and AKR do not stain with 53-2.1. CD90 is involved in regulation of adhesion and signal transduction by T cells.

Applications Reported: This 53-2.1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 53-2.1 antibody has been tested by flow cytometric analysis of mouse splenocytes. This may be used at less than or equal to 0.125 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.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

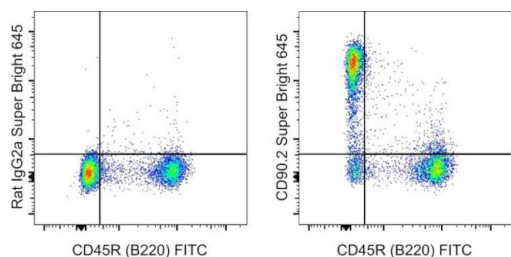
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4 degrees 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: 405 nm; Emission: 645 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD90.2 (Thy-1.2) Monoclonal Antibody (53-2.1), Super Bright™ 645, eBioscience™



CD90.2 (Thy-1.2) Antibody (64-0902-82) in Flow

Swiss Webster mouse splenocytes were stained with CD45R (B220) Monoclonal Antibody, FITC (Product # 11-0452) and 0.06 μ g of Rat IgG2a kappa Isotype Control, Super Bright 645 (Product # 64-4321) (left) or 0.06 μ g of CD90.2 (Thy-1.2) Monoclonal Antibody, Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

7 References

Immunohistochemistry (1)

Nature communications

Lasp1 regulates adherens junction dynamics and fibroblast transformation in destructive arthritis.

"Published figure using CD90.2 (Thy-1.2) monoclonal antibody (Product # 64-0902-82) in Immunohistochemistry"

Authors: Beckmann D,Römer-Hillmann A,Krause A,Hansen U,Wehmeyer C,Intemann J,de Gorter DJJ,Dankbar B,Hillen J,Heitzmann M,Begemann I,Galic M,Weinhage T,Foell D,Ai R,Kremerskothen J,Kiener HP,Müller S,Kamradt T,Schröder C,Leitão E,Horsthemke B,Rosenstiel P,Nordström K,Gasparoni G,Gasparoni N,Walter J,Li N,Yang X,Chung HR,Pavenstädt H,Lindemann N,Schnittler HJ,Wang W,Firestein GS,Pap T,Korb-Pap A

Year
2021

Flow Cytometry (6)

Nature communications

A single-cell transcriptional atlas reveals resident progenitor cell niche functions in TMJ disc development and injury.

"Published figure using CD90.2 (Thy-1.2) monoclonal antibody (Product # 64-0902-82) in Flow Cytometry"

Authors: Bi R,Yin Q,Li H,Yang X,Wang Y,Li Q,Fang H,Li P,Lyu P,Fan Y,Ying B,Zhu S

Year
2023

Therapeutic advances in chronic disease

Extracellular HMGB-1 activates inflammatory signaling in tendon cells and tissues.

"Published figure using CD90.2 (Thy-1.2) monoclonal antibody (Product # 64-0902-82) in Flow Cytometry"

Authors: Zhang C,Gu X,Zhao G,Wang W,Shao J,Zhu J,Yuan T,Sun J,Nie D,Zhou Y

Year
2022

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More applications with references on thermofisher.com

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