

# CD90.2 (Thy-1.2) Monoclonal Antibody (30-H12), Super Bright™ 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	30-H12
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 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_2762810

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	2 Publications

## Product Specific Information

**Description:** The 30-H12 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/J, SJL and others. Cells from CD90.1-expressing strains including PL and AKR do not stain with 30-H12. CD90 is involved in regulation of adhesion and signal transduction by T cells.

**Applications Reported:** This 30-H12 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 30-H12 antibody has been tested by flow cytometric analysis of mouse splenocytes. This may be used at less than or equal to 0.5 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color

stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

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.

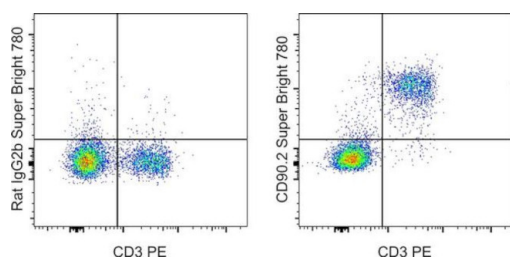
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100  $\mu$ L of cell sample + 100  $\mu$ L 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.

Excitation: 405 nm; Emission: 780 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 (30-H12), Super Bright™ 780, eBioscience™



#### CD90.2 (Thy-1.2) Antibody (78-0903-82) in Flow

C57BL/6 mouse splenocytes were stained with CD3 Monoclonal Antibody, PE (Product # 12-0031-82) and 0.25  $\mu$ g of Rat IgG2b kappa Isotype Control, Super Bright 780 (Product # 78-4031-82) (left) or 0.25  $\mu$ g of CD90.2 Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis.

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

## 4 References

### Immunohistochemistry (1)

Nature cell biology

#### Denervation-activated STAT3-IL-6 signalling in fibro-adipogenic progenitors promotes myofibres atrophy and fibrosis.

"Published figure using CD90.2 (Thy-1.2) monoclonal antibody (Product # 78-0903-82) in Immunohistochemistry"

Authors: Madaro L, Passafaro M, Sala D, Etxaniz U, Lugarini F, Proietti D, Alfonsi MV, Nicoletti C, Gatto S, De Bardi M, Rojas-García R, Giordani L, Marinelli S, Pagliarini V, Sette C, Sacco A, Puri PL

Year  
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Year  
2018

### Flow Cytometry (2)

Experimental and therapeutic medicine

#### Bcl-xL mutant promotes cartilage differentiation of BMSCs by upregulating TGF-/BMP expression levels.

"Published figure using CD90.2 (Thy-1.2) monoclonal antibody (Product # 78-0903-82) in Flow Cytometry"

Authors: Xiao K, Yang L, Xie W, Gao X, Huang R, Xie M

Year  
2021

NPJ vaccines

#### Mechanisms of interleukin 4 mediated increase in efficacy of vaccines against opioid use disorders.

"Published figure using CD90.2 (Thy-1.2) monoclonal antibody (Product # 78-0903-82) in Flow Cytometry"

Authors: Crouse B, Robinson C, Huseby Kelcher A, Laudenbach M, Abrahante JE, Pravetoni M

Year  
2020

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