

# CD90.2 (Thy-1.2) Monoclonal Antibody (53-2.1), PE-Cyanine7, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Fish, Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	53-2.1
Conjugate	PE-Cyanine7
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469642

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 µg/test	29 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

## 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 can be used at less than or equal to 0.06 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.

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

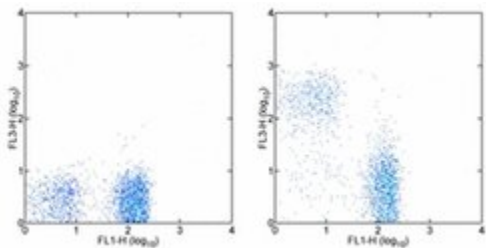
**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency

/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 CD90.2 (Thy-1.2) Monoclonal Antibody (53-2.1), PE-Cyanine7, eBioscience™



### CD90.2 (Thy-1.2) Antibody (25-0902-82) in Flow

Staining of C57BL/6 splenocytes with Anti-Human/Mouse CD45R (B220) FITC (Product # 11-0452-82) and 0.03 µg of Rat IgG2a K Isotype Control PE-Cyanine7 (Product # 25-4321-82) (left) or 0.03 µg of Anti-Mouse CD90-2 (Thy-1-2) PE-Cyanine7 (right). Cells in the lymphocyte gate were used for analysis.

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

## 30 References

### Flow Cytometry (29)

#### PLoS pathogens

##### Early virus-host interactions dictate the course of a persistent infection.

"25-0902 was used in Flow cytometry/Cell sorting to investigate the very early host-virus interactions that determine the establishment of viral persistence."

Authors: Sullivan BM, Teijaro JR, de la Torre JC, Oldstone MB

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2015

#### PLoS pathogens

##### MyD88 signaling in dendritic cells and the intestinal epithelium controls immunity against intestinal infection with *C. rodentium*.

"25-0902 was used in Flow cytometry/Cell sorting to suggest that MyD88 signaling in DC and IEC is both essential and sufficient to induce a full spectrum of host responses upon intestinal infection with *C. rodentium*."

Authors: Friedrich C, Mamareli P, Thiemann S, Kruse F, Wang Z, Holzmann B, Strowig T, Sparwasser T, Lochner M

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2017

[View more Flow references on thermofisher.com](#)

### Miscellaneous PubMed (1)

#### Journal of immunology (Baltimore, Md. : 1950)

##### Tc17, a unique subset of CD8 T cells that can protect against lethal influenza challenge.

"25-0902 was used in Flow cytometry/Cell sorting to study the role of Tc17 cells in influenza infection, showing that they protect against lethality."

Authors: Hamada H, Garcia-Hernandez Mde L, Reome JB, Misra SK, Strutt TM, McKinstry KK, Cooper AM, Swain SL, Dutton RW

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2009

### More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.