CD90.2 (Thy-1.2) Monoclonal Antibody (53-2.1), NovaFluor™ Blue 610-70S, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	53-2.1
Conjugate	NovaFluor™ Blue 610-70S
Excitation/Emission Max	492/616 nm
Form	Liquid
Concentration	0.1 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!

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.4 µg/test	-

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.

Each product contains 1 vial of NovaFluor conjugate and 1 vial of CellBlox Plus Blocking Buffer .

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

Applications Tested: The 53-2.1 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.4 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

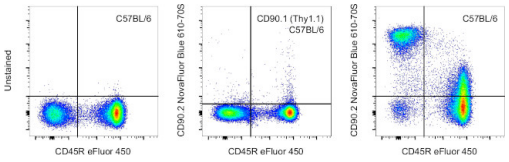
NovaFluor dyes are not compatible with DNA intercalating viability dyes. Do not use viability dyes such as propidium iodide, 7-actinomycin D (7-AAD) and DAPI. Invitrogen LIVE/DEAD Fixable Dead Cell stains are recommended for use with NovaFluor dyes.

This NovaFluor conjugate has been updated to ship with CellBlox Plus Blocking Buffer (Cat. No. (C001T06F01)). This buffer contains formulation improvements over CellBlox. CellBlox Plus Blocking Buffer is required for optimal staining with NovaFluor conjugates and should be used in all experiments where NovaFluor conjugates are used. Whenever possible, we recommend adding CellBlox Plus Blocking Buffer to antibody cocktails/master mixes prior to combining with cells. Add 5 µL per sample (regardless of the number of NovaFluors in your panel) to use the antibody cocktail as intended. For single-color controls, use 5 µL of CellBlox Blocking Buffer per 100 µL of cell sample containing 10^3 to 10^8 cells.

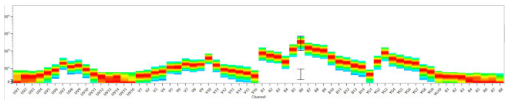
NovaFluor conjugates are based on Phiton™ technology utilizing novel nucleic acid dye structures that allow for engineered fluorescent signatures with consideration for spillover and spread impacts. Learn more

Excitation: 509 nm; Emission: 614 nm; Laser: 488 nm (Blue) Laser

Product Images For CD90.2 (Thy-1.2) Monoclonal Antibody (53-2.1), NovaFluor™ Blue 610-70S, eBioscience™



CD90.2 (Thy-1.2) Antibody (M028T03B06-A) in Flow
C57BL/6 mouse splenocytes were unstained (left) or stained with 0.4 µg of CD90.2 (Thy-1.2) Monoclonal Antibody, NovaFluor Blue 610-70S (right). CD90.1 (Thy1.1) splenocytes on a C57BL/6 background were stained with 0.4 µg of CD90.2 (Thy-1.2) Monoclonal Antibody, NovaFluor Blue 610-70S (Product # M028T03B06) (middle). All cells were co-stained with CD45R (B220) Monoclonal Antibody, eFluor 450 (Product # 48-0452-82). Total viable cells in the lymphocyte gate were used for analysis, as determined by LIVE/DEAD Blue (Product # L34962). Data was acquired on a 5-laser Cytek Aurora and unmixed with autofluorescence extraction.



CD90.2 (Thy-1.2) Antibody (M028T03B06-A) in Flow
Spectral signature for NovaFluor Blue 610-70S collected on a 5-laser Cytek Aurora Full Spectrum flow cytometer using Cytek assay settings. Human peripheral blood mononuclear cells were stained with anti-human CD4 (SK3) and signatures displayed following gating on the lymphocyte population.