abcam

ab242270

violetFluor™ 450 Anti-Thy1.2 antibody [30-H12]

Anti-Thy1.2 antibody [30-H12] conjugated to violetFluor™ 450 - suitable for flow cytometry, and reacts with mouse samples. Clone [30-H12] is a rat monoclonal antibody and one of the most commonly used clones for flow cytometry.

Design your panel with our interactive flow cytometry panel builder. Click here.

Key facts

Isotype	IgG2b
Host species	Rat
Conjugation	violetFluor™ 450
Excitation/Emission	Ex: 405nm, Em: 450nm
Storage buffer	pH: 7.2 Preservative: 0.09% Sodium azide Constituents: 0.87% Sodium chloride, 0.12% Sodium dihydrogen phosphate, 0.1% Gelatin
Form	Liquid
Clonality	Monoclonal
Clone number	30-H12
Purification technique	Affinity purification
Specificity	The 30-H12 antibody reacts with mouse CD90.2 (Thy1.2). 30-H12 does not react with the CD90.1 allele expressed in mouse strains such as PL and AKR.
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation.

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	Use 0.25 µg.

Target data

See full target information Thy1

Function	May play a role in cell-cell or cell-ligand interactions during synaptogenesis and other events in the brain.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Thy1.2 also known as Thy-1 antigen or CD90 is a glycoprotein with a mass of approximately 25-35 kDa. It is expressed on the surface of many cell types including neurons thymocytes and fibroblasts. Thy1.2 is part of the immunoglobulin superfamily and plays a role in cell-cell interactions adhesion and signal transduction. Researchers often study Thy1.2 in the context of the mouse model as it is a well-defined target in murine immunology and neurobiology.
Biological function summary	The Thy1.2 protein influences cellular adhesion and migration processes. It does not form part of a known complex but regulates multiple interactions at the cellular membrane. In the nervous system Thy1.2 impacts neurite outgrowth and synapse formation. In the immune system it modulates T-cell activation and cytokine production. These actions make Thy1.2 integral to cellular communication and response mechanisms.

Pathways	Thy1.2 plays significant roles in signal transduction and cell adhesion pathways. It participates in the MAPK/ERK pathway which is important for cell growth and survival. Thy1.2 interacts closely with integrin proteins facilitating cell-matrix adhesion and signaling. This connection supports cellular processes that depend on environmental cues impacting both development and immune responses.
Associated diseases and disorders	Thy1.2 shows significant associations with cancer and fibrosis. In cancer abnormal Thy1.2 expression or function can influence tumor growth and metastasis often in conjunction with other proteins such as integrins and CD44. In fibrosis Thy1.2 impacts fibroblast activity and extracellular matrix regulation leading to tissue remodeling. Studies explore how modulating Thy1.2 levels or function might offer therapeutic potential in these conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

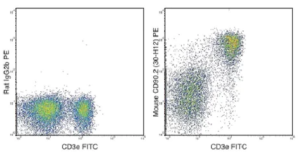
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Flow Cytometry - violetFluor™ 450 Anti-Thy1.2 antibody [30-H12] (ab242270)

Thy1.2 Flow Cytometry staining using rat Anti-Thy1.2 antibody

Flow cytometric analysis of C57Bl/6 splenocytes staining CD90 / Thy1 using FITC Anti-Mouse CD3e and 0.25 µg ab242270 (right panel) or 0.25 µg violet- Fluor™ 450 Rat IgG2b isotype control (left panel).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.