abcam

ab288825

Anti-CD90 / Thy1 antibody [H169V2/L1D33V1] - BSA and Azide free

Recombinant

Key facts

Isotype	IgG1
Host species	Human
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Carrier free	Yes
Clone number	H169V2/L1D33V1
Purification technique	Affinity purification Protein A
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from CHO cell tissue culture supernatant.

Reactivity data

ICC/IF

Tested

Species	Human

Dilution info	10 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	10 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

ELISA

Tested

Species	Recombinant full length protein - Human
Dilution info	0.001-10000 µg/mL
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

SPR

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

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

Notes

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Supplementary info

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

Activity summary	CD90 also known as Thy1 is a glycoprotein with a molecular mass of approximately 25-37 kDa. It is highly conserved across species and found on the surface of various cell types including fibroblasts neurons and endothelial cells. CD90 is expressed in these cells in tissues such as the brain thymus and lungs. Researchers use anti-CD90 antibodies for detection often in combination with CD90 FITC in immunofluorescence assays. CD90 serves as a useful cell marker particularly in identifying mesenchymal stem cells (MSCs).
Biological function summary	CD90 plays a role in cell-cell and cell-matrix interactions contributing to cellular adhesion migration and signal transduction. It functions as part of a complex involving integrins which mediate its interaction with the extracellular matrix. This protein also influences T-cell activation reflecting its importance in immune response regulation. Its presence aids in modulating response to injury and promoting tissue repair due to its association with stem and progenitor cells.
Pathways	CD90 engagement affects focal adhesion and MAPK signaling pathways. It interacts with integrins like αvβ3 and α5β1 influencing cell movement and proliferation processes. CD90 involvement in these pathways allows it to regulate responses important for cell survival and communication within various tissues. These interactions highlight the protein's role in maintaining cellular homeostasis and regulating physiological processes.
Associated diseases and disorders	CD90 has associations with fibrosis and cancer. In fibrotic conditions CD90 expression affects fibroblast activity influencing tissue scarring in organs such as the liver and lungs. In cancer CD90 modifies tumor progression and metastasis by impacting cell adhesion and migration with connections to proteins like TGF-beta which further drive these processes. Understanding CD90 in disease contexts facilitates the development of therapeutic strategies aimed at modulating its activity.

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.

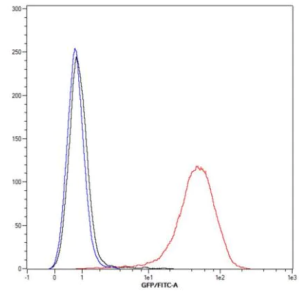
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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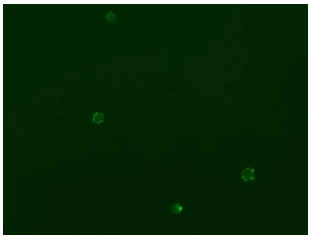
6 product images



Flow Cytometry - Anti-CD90 / Thy1 antibody [H169V2/L1D33V1] - BSA and Azide free (ab288825)

CD90 / Thy1 Flow Cytometry staining using human Anti-CD90 / Thy1 antibody

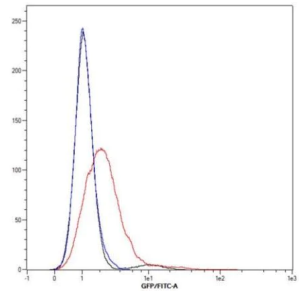
Flow cytometric analysis of Jurkat (human T cell leukemia cell line from peripheral blood) cells using ab288825 at 10 µg/mL, followed by an FITC-labelled Goat anti-Human IgG Fc secondary antibody at 1/1000 dilution (red). The controls are unstained cells (blue) and cell treated only with secondary antibody (black).



Immunocytochemistry/ Immunofluorescence - Anti-CD90 / Thy1 antibody [H169V2/L1D33V1] - BSA and Azide free (ab288825)

CD90 / Thy1 Immunocytochemistry/ Immunofluorescence staining using human Anti-CD90 / Thy1 antibody

Jurkat (human T cell leukemia cell line from peripheral blood) cells were labeled with ab288825 at 10 µg/mL, followed by an FITC-labeled Goat anti-Human IgG Fc secondary antibody at 1/1000 dilution.

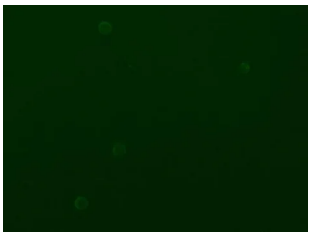


Flow Cytometry - Anti-CD90 / Thy1 antibody [H169V2/L1D33V1] - BSA and Azide free (ab288825)

CD90 / Thy1 Flow Cytometry staining using human Anti-CD90 / Thy1 antibody

Flow cytometric analysis of Kasumi (human acute myeloid leukemia myoblast from peripheral blood) cells using ab288825 at 10 µg/mL, followed by an FITC-labelled Goat anti-Human IgG Fc

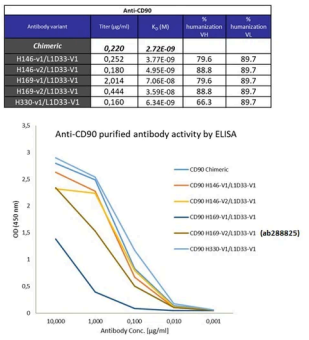
secondary antibody at 1/1000 dilution (red). The controls are unstained cells (blue) and cell treated only with secondary antibody (black).



Immunocytochemistry/ Immunofluorescence - Anti-CD90 / Thy1 antibody [H169V2/L1D33V1] - BSA and Azide free (ab288825)

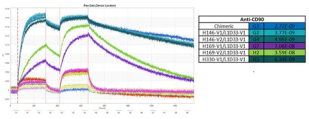
CD90 / Thy1 Immunocytochemistry/ Immunofluorescence staining using human Anti-CD90 / Thy1 antibody

Jurkat (human T cell leukemia cell line from peripheral blood) cells were labeled with an FITC-labeled Goat anti-Human IgG Fc secondary antibody at 1/1000 dilution.
Secondary antibody only control.



ELISA - Anti-CD90 / Thy1 antibody [H169V2/L1D33V1] - BSA and Azide free (ab288825)

ELISA analysis of ab288825. Plates were coated with 50 µL (at 1 µg/mL) of recombinant human CD90 (aa1-130 with C-terminal DDDDK tag).



Surface Plasmon Resonance - Anti-CD90 / Thy1 antibody [H169V2/L1D33V1] - BSA and Azide free (ab288825)

Surface Plasmon Resonance anysis of ab288825. The biosensor was coated with 20 µg/mL of antibody for 200 seconds. Recombinant human CD90 antigen (aa1-130 with C-terminal DDDDK tag) was used at 100 nM and 500 nM.
ab288825 = H169-V2/L1D33-V1

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