abcam

ab322673

# PE Anti-CD90 / Thy1 antibody [EPR28145-53]

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Conjugation** | PE |
| **Excitation/Emission** | Ex: 480;565nm, Em: 578nm |
| **Storage buffer** | pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | EPR28145-53 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.5 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/5000 |

| | |
|---|---|
| **Notes** | - |

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/5000 |
| **Notes** | - |

| | |
|---|---|
| **Species** | Rat |
| **Dilution info** | 1/5000 |
| **Notes** | - |

## ICC/IF

### Expected

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **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 duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle, Store in the dark |

## Notes

**Patented technology**
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**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.

## 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.

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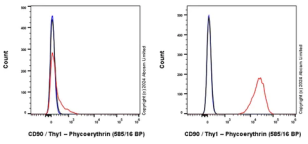
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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## 3 product images

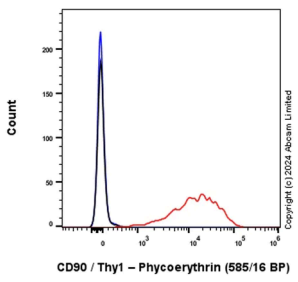


### Flow Cytometry - PE Anti-CD90 / Thy1 antibody [EPR28145-53] (ab322673)

Flow cytometric analysis of K-562 (human chronic myelogenous leukemia lymphoblast, Left) / U-2 OS (human bone osteosarcoma epithelial cell, Right) cells labelling CD90 / Thy1 with ab322673 at 1/5000 dilution (0.01ug) (Red) compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin) (ab209478) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Gated on viable cells.
Negative control: K-562.

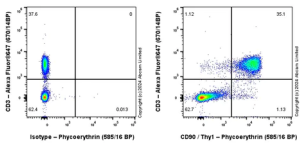
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### Flow Cytometry - PE Anti-CD90 / Thy1 antibody [EPR28145-53] (ab322673)

Flow cytometric analysis of PC-12 (rat adrenal gland pheochromocytoma) cells labelling CD90 / Thy1 with ab322673 at 1/5000 dilution (0.01ug) (Red) compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin) (ab209478) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Gated on viable cells.



## Flow Cytometry - PE Anti-CD90 / Thy1 antibody [EPR28145-53] (ab322673)

Flow cytometric analysis of Mouse peripheral blood mononuclear cell (PBMC) cells labelling CD90 / Thy1 with ab322673 at 1/5000 dilution (0.01ug) / Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin) (ab209478) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Cells were stained with anti-CD3 conjugated to Alexa Fluor® 647.
Gated on viable cells.

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