

**Anti-CD90/Thy1 Picoband Antibody**  
**Catalog # ABO10216****Specification**

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**Anti-CD90/Thy1 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P01831</a>
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Thy-1 membrane glycoprotein(Thy1) detection. Tested with WB, IHC-P in Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-CD90/Thy1 Picoband Antibody - Additional Information**

**Gene ID** 21838

**Other Names**

Thy-1 membrane glycoprotein, Thy-1 antigen, CD90, Thy1, Thy-1

**Calculated MW**

18080 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Mouse, Rat<br>

**Subcellular Localization**

Cell membrane; Lipid-anchor, GPI-anchor.

**Protein Name**

Thy-1 membrane glycoprotein

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E.coli-derived mouse CD90/Thy1 recombinant protein (Position: Q20-C131). Mouse CD90/Thy1 shares 63.4% and 81.3% amino acid (aa) sequence identity with human and rat CD90/Thy1, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Anti-CD90/Thy1 Picoband Antibody - Protein Information**

**Name** Thy1

**Synonyms** Thy-1

**Function**

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

**Cellular Location**

Cell membrane; Lipid-anchor, GPI-anchor.

**Anti-CD90/Thy1 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

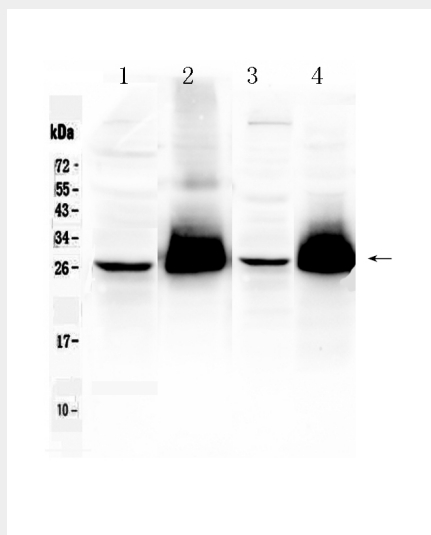
**Anti-CD90/Thy1 Picoband Antibody - Images**

Figure 1. Western blot analysis of CD90/Thy1 using anti- CD90/Thy1 antibody (ABO10216). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse brain tissue lysates, Lane 2: mouse thymus tissue lysates, Lane 3: mouse lung tissue lysates, Lane 4: rat thymus tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD90/Thy1 antigen affinity purified polyclonal antibody (Catalog # ABO10216) at 0.5  $\mu$ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD90/Thy1 at approximately 26KD. The expected band size for CD90/Thy1 is at 18KD.

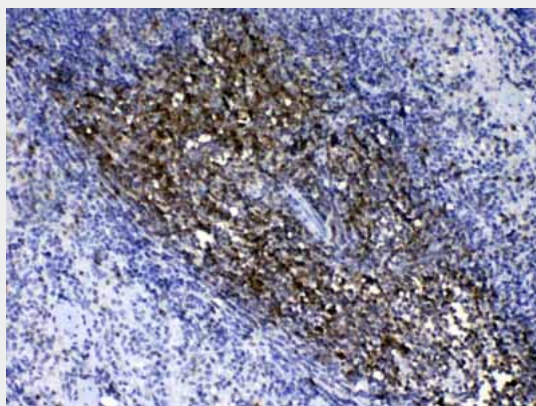


Figure 2. IHC analysis of CD90/Thy1 using anti- CD90/Thy1 antibody (ABO10216).CD90/Thy1 was detected in paraffin-embedded section of mouse spleen tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- CD90/Thy1 Antibody (ABO10216) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

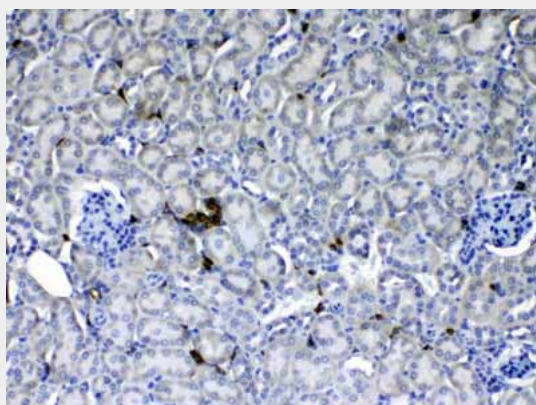


Figure 3. IHC analysis of CD90/Thy1 using anti- CD90/Thy1 antibody (ABO10216).CD90/Thy1 was detected in paraffin-embedded section of mouse kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- CD90/Thy1 Antibody (ABO10216) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

#### Anti-CD90/Thy1 Picoband Antibody - Background

CD90 (Cluster of Differentiation 90) or Thy-1 is a 25–37 kDa heavily N-glycosylated, glycosylphosphatidylinositol (GPI) anchored conserved cell surface protein with a single V-like immunoglobulin domain, originally discovered as a thymocyte antigen. The CD90 gene is mapped to 11q23.3. Thy-1 can be used as a marker for a variety of stem cells and for the axonal processes of mature neurons. Structural study of Thy-1 led to the foundation of the Immunoglobulin superfamily, of which it is the smallest member, and led to the first biochemical description and characterization of a vertebrate GPI anchor.