

Anti-CD90/Thy1 Antibody Picoband™

Catalog Number: A01818-1

About THY1

CD90 (Cluster of Differentiation 90) or Thy-1 is a 25–37 kDa heavily N-glycosylated, glycoposphatidylinositol (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 lead 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.

Overview

Product Name	Anti-CD90/Thy1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CD90/Thy1 Antibody Picoband™ catalog # A01818-1. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P04216

Technical Details

Immunogen	E.coli-derived human CD90/Thy1 recombinant protein (Position: Q20-H111).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.25ug/ml, Human, Mouse, Rat Direct ELISA, 0.1-0.5ug/ml, Human

Anti-CD90/Thy1 Antibody Picoband™ (A01818-1) Images

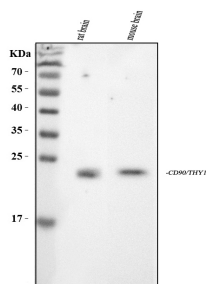


Figure 1. Western blot analysis of CD90/Thy1 using anti-CD90/Thy1 antibody (A01818-1).

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 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 # A01818-1) at 0.5 ug/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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD90/Thy1 at approximately 24 kDa. The expected band size for CD90/Thy1 is at 18 kDa.

4 Publications Citing This Product

1. PubMed ID: -, Wu,H.,Jiang,X.,Li,Y.,Zhou,Y.,Zhang,T.,Zhi,P.,Gao,J.,Engineering Stem Cell Derived Biomimetic Vesicles for Versatility and Effective Targeted Delivery.Adv. Funct.Mater.2020, 30, 2006169.<https://doi.org/10.1002/adfm.202006169>
2. PubMed ID: 22553557, Differentiation of mesenchymal stem cell in the microenviroment of retinitis pigmentosa
3. PubMed ID: 28341839, Therapeutic efficacy of neural stem cells originating from umbilical cord-derived mesenchymal stem cells in diabetic retinopathy

Visit bosterbio.com/anti-cd90-thy1-picoband-trade-antibody-a01818-1-boster.html to see all 4 publications.

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