

---

## CD90/Thy-1 Rabbit pAb

Catalog Number: bs-0778R

Target Protein: CD90/Thy-1

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (1µg/Test)

Reactivity: Human, Mouse, Rat (predicted:Rabbit, Pig, Sheep, Dog, Horse)

Predicted MW: 12 kDa

Detected MW: 25-35 kDa

Entrez Gene: 24832

Swiss Prot: P01830

Source: KLH conjugated synthetic peptide derived from rat Thy-1: 31-120/161.

Purification: affinity purified by Protein A

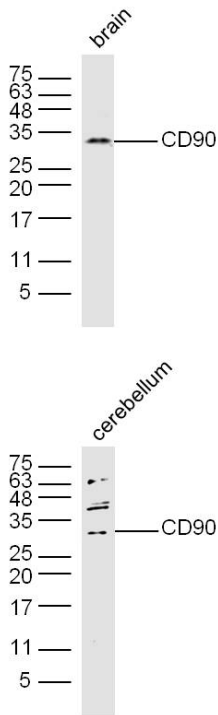
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Thy-1 or CD90 (Cluster of Differentiation 90) is a 25–37 kDa heavily N-glycosylated, glycophosphatidylinositol (GPI) anchored conserved cell surface protein with a single V-like immunoglobulin domain, originally discovered as a thymocyte antigen. 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 some of the initial biochemical description and characterization of a vertebrate GPI anchor and also the first demonstration of tissue specific differential glycosylation.

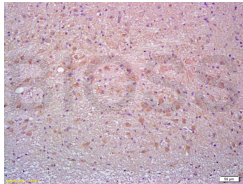
### VALIDATION IMAGES

---

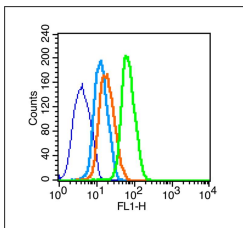


Sample: Brain (Mouse) Lysate at 40 ug Primary: Anti-CD90 (bs-0778R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 12 kD Observed band size: 32 kD

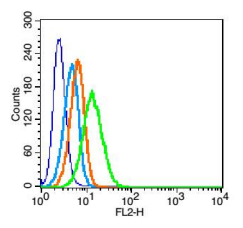
Sample: Brain (Mouse) Lysate at 40 ug Primary: Anti-CD90 (bs-0778R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 12 kD Observed band size: 32 kD



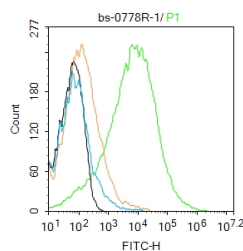
Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Thy-1/CD90/Thy1.1 Polyclonal Antibody, Unconjugated(bs-0778R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (blue line): U251 (blue). Primary Antibody (green line): Rabbit Anti-CD90 antibody (bs-0778R) Dilution: 1µg /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC Dilution: 1µg /test. Protocol The cells were fixed with 70% ice-cold methanol overnight at 4°C. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control: U937(blue). Primary Antibody: Rabbit Anti-CD90 antibody(bs-0778R), Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG (orange) ,used under the same conditions. Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol The cells were fixed with 2% paraformaldehyde (10 min).Primary antibody (bs-0778R, 1µg /1x10<sup>6</sup> cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.



Blank control:Mouse brain. Primary Antibody (green line): Rabbit Anti-CD90 antibody (bs-0778R) Dilution: 1µg /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF488 Dilution: 1µg /test. Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=13.3] Manyu Chen. et al. Injectable biomimetic microcarriers harness synergistic effects of paracrine factors and cellular membranes

to alleviate osteoarthritis. CHEM ENG J. 2025 Jan;503:158451 FC ; Rat . 10.1016/j.cej.2024.158451

[IF=13.3] Fangyu Qiao. et al. Dual siRNA-Loaded Cell Membrane Functionalized Matrix Facilitates Bone Regeneration with Angiogenesis and Neurogenesis. SMALL. 2023 Oct;;2307062 IF ; Rat . 37824284

[IF=10.7] Zitong Zhao. et al. CircMALAT1 promotes cancer stem-like properties and chemoresistance via regulating Musashi-2/c-Myc axis in esophageal squamous cell carcinoma. MedComm. 2024 Jun;5(6):e612 IHC ; Mouse . 38881674

[IF=9.776] Ruijing Zhao. et al. Inhalation of MSC-EVs is a noninvasive strategy for ameliorating acute lung injury. J Control Release. 2022 May;345:214 FCM ; Human . 35307508

[IF=8.579] Jipeng Jiang. et al. Implantation of regenerative complexes in traumatic brain injury canine models enhances the reconstruction of neural networks and motor function recovery. Theranostics. 2021; 11(2): 768–788 FCM ; Human . 33391504