Anti-Rat CD90 Antibody, Clone OX-7, FITC

Antibodies

Mouse monoclonal IgG1 antibody against mouse, rat, guinea pig CD90/CD90.1, FITC-conjugated

Catalog #60024FI #60024FI.1

4FI 500 μg 0.5 mg/mL 4FI.1 100 μg 0.5 mg/mL



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Product Description

The OX-7 antibody reacts with rat CD90 (Thy-1) and mouse CD90.1 (Thy-1.1), the latter being an allelic form of CD90 expressed by mouse strains AKR/J, PL, and FVB/N. The OX-7 antibody does not react with CD90.2, which is expressed by many mouse strains, including CBA and BALB/c. CD90 is a GPI-linked membrane glycoprotein and member of the immunoglobulin superfamily. The 25 kDa core protein is N-glycosylated at three sites, giving rise to molecules with a range of molecular masses (25 - 37 kDa). In the rat, CD90 is expressed by several cell types, including hematopoietic stem cells, immature B cells, thymocytes, and neurons. In mouse strains expressing CD90.1, it is found on early-stage hematopoietic cells in the bone marrow, thymocytes, and circulating mature T cells. The OX-7 antibody has been reported to induce leukocyte activation, glomerular nephritis, apoptosis in glomerular mesangial cells, and vascular permeability.

Target Antigen Name: CD90/CD90.1
Alternative Names: Thy-1, Thy-1.1
Gene ID: 21838/24832

Species Reactivity: Mouse (AKR/J and PL mouse strains), Rat, Guinea Pig, Rabbit

Host Species: Mouse (BALB/c)
Clonality: Monoclonal

Clone: OX-7

Isotype: IgG1, kappa

Immunogen:Rat thymocyte CD90 (Thy-1) antigenConjugate:FITC (Fluorescein isothiocyanate)

Applications

Verified: FC Reported: FC

Special Applications: This antibody clone has been verified for purity assessments of cells isolated from compatible mouse strains with

EasySep™ kits, including EasySep™ Mouse T Cell Isolation Kit (Catalog #19851).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide, may contain carrier protein/stabilizer

Purification: The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The

solution is free of unconjugated FITC.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light.

For product expiry date, contact techsupport@stemcell.com.

Directions for Use: For flow cytometry, the suggested use of this antibody is $\leq 0.25 \,\mu g$ per 1 x 10⁶ cells in 100 μL . It is

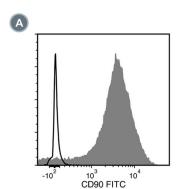
recommended that the antibody be titrated for optimal performance for each application.

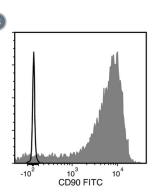
Antibodies Anti

Anti-Rat CD90 Antibody, Clone OX-7, FITC



Data





(A) Flow cytometry analysis of Sprague-Dawley rat brain cells labeled with Anti-Rat CD90 Antibody, Clone OX-7, FITC (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, FITC (Catalog #60070FI) (solid line histogram).

(B) Flow cytometry analysis of Sprague-Dawley rat thymocytes labeled with Anti-Rat CD90 Antibody, Clone OX-7, FITC (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, FITC (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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- 9. Paul LC et al. (1984) Thy-1.1 in glomeruli of rat kidneys. Kidney Int 25(5): 771-7. (Electron Microscopy, IHC)
- 10. Mason DW & Williams AF. (1980) The kinetics of antibody binding to membrane antigens in solution and at the cell surface. Biochem J 187(1): 1–20.

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