

Purified anti-human CD90 (Thy1)

Catalog # / Size: 2240510 / 100 µg
2240505 / 25 µg

Clone: 5E10

Isotype: Mouse IgG1, κ

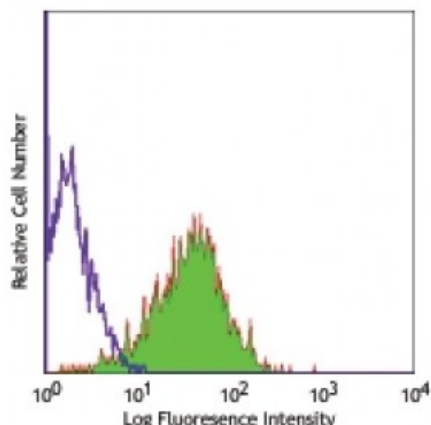
Immunogen: HEL cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



Human erythroleukemic cell line HEL stained with purified 5E10, followed by anti-mouse IgG FITC

Applications:

Applications: Other

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Clone 5E10 recognizes an epitope on Thy-1 independent of its glycosylation, but is abolished under reducing conditions.⁴ Additional reported (for the relevant formats) applications include: immunohistochemical staining of acetone-fixed frozen sections, immunoprecipitation¹, and immunofluorescence³.

Application References:

1. Craig W, *et al.* 1993. *J. Exp. Med.* 177:1331. (IP)
2. Gundlach CW 4th, *et al.* 2011. *Bioconjug. Chem.* 22:1706. (Pig Reactivity)
3. Touboul C, *et al.* 2013. *J. Transl. Med.* 11:28. (IF)
4. Bradley JE, *et al.* 2013. *Lab Invest.* 93:365. (Epitope)
5. Donnenberg VS, *et al.* 2010. *Cytometry B. Clin. Cytom.* 5:287. (IHC)

Description: CD90 is a 25-35 kD GPI-anchored protein, also known as Thy-1. It belongs to the Ig superfamily. Human CD90 is expressed on neuronal cells, a subset of CD34⁺ cells, a subset of fetal liver cells and fetal thymocytes, fibroblasts, activated endothelial cells, and some leukemia cell lines. CD34⁺CD90⁺ cells are primitive hematopoietic stem cells. It has been reported that Thy-1 binds with β2 and β3 integrins and plays bimodal roles in the regulation of cell adhesion and neurite outgrowth, and inhibits hematopoietic stem cells proliferation and differentiation.

Antigen References:

1. McKenzie JL, *et al.* 1981. *J. Immunol.* 126:843.
2. Avalos AM, *et al.* 2002. *Biol. Res.* 35:231.
3. Wetzel A, *et al.* 2004. *J. Immunol.* 172:3850.