

PE/Cy7 anti-human CD90 (Thy1)

Catalog # / Size: 2240615 / 25 tests
2240620 / 100 tests

Clone: 5E10

Isotype: Mouse IgG1, κ

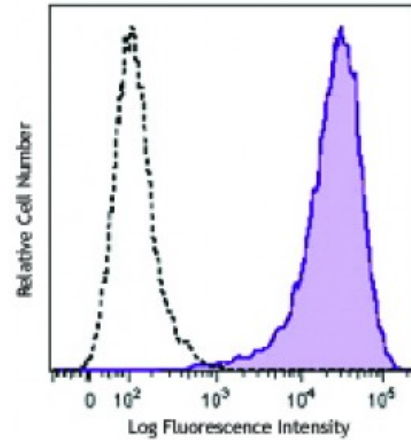
Immunogen: HEL cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human erythroleukemia cell line (HEL) was stained with CD90 (clone 5E10) PE/Cy7 (filled histogram) or mouse IgG1, κ PE/Cy7 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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 5 microL per million cells or 5 microL per 100 microL of whole blood. 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. Wetzell A, *et al.* 2004. *J. Immunol.* 172:3850.