

PE/Cy5 anti-human CD90 (Thy1)

Catalog # / Size: 2240555 / 25 tests
2240560 / 100 tests

Clone: 5E10

Isotype: Mouse IgG1, κ

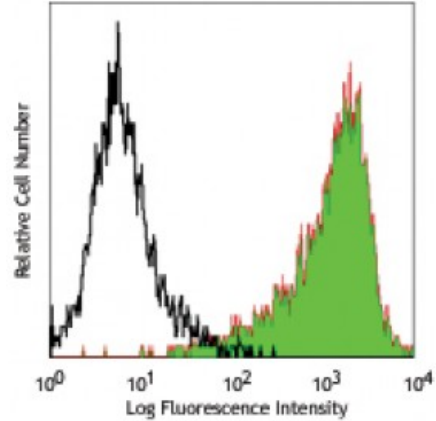
Immunogen: HEL cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE/Cy5 under optimal conditions. The solution is free of unconjugated PE/Cy5 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 erythroleukemic cell line HEL stained with 5E10 PE/Cy5

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or 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 $\beta 2$ and $\beta 3$ 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.