Technical Data Sheet

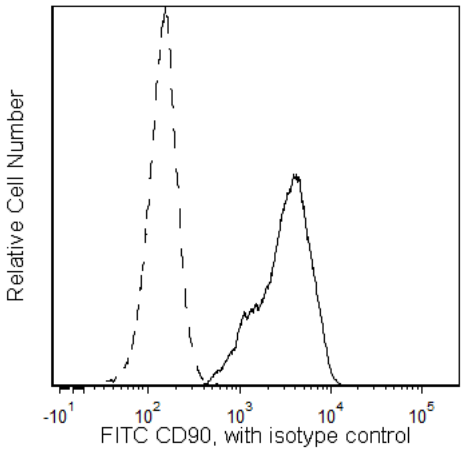
FITC Mouse Anti-Human CD90

Product Information

Material Number:	**561969**
Alternate Name:	THY1; Thy-1 antigen; Thy-1 membrane glycoprotein
Size:	25 µg
Concentration:	0.5 mg/ml
Clone:	5E10
Immunogen:	Human HEL Cell Line
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human Tested in Development: Rhesus, Cynomolgus, Baboon, Pig, Dog
Workshop:	V M07, BP222; VI BP28, E046
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 5E10 monoclonal antibody specifically binds to human CD90 which is also known as Thy-1. CD90 is a 25-35 kDa glycophosphatidylinositol-anchored membrane glycoprotein of the Ig superfamily that is expressed on 1-4% of human fetal liver cells, cord blood cells, and bone marrow cells. The anti-CD90 antibody binds to a subset of immature CD34+ cells and a distinct subset of mature CD34- cells that are CD3+CD4+. The CD90+CD34+ population is highly enriched for cells capable of long-term culture. The anti-CD90 antibody is useful for enriching high proliferative potential colony-forming cells (HIPP-CFC) that are primative progenitor cells.



Flow cytometric analysis of CD90 expression on HEL cell line. *HEL cells were stained with either FITC Mouse IgG1, κ Isotype Control (Cat. No. 555748; dashed line histogram) or FITC Mouse Anti-Human CD90 (Cat. No. 555595/561969; solid line histogram). Fluorescent histograms were derived from gated events with the side and forward light-scatter characteristics of viable HEL cells.*

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555748	FITC Mouse IgG1, κ Isotype Control	100 Tests	MOPC-21
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
555595	FITC Mouse Anti-Human CD90	0.1 mg	5E10

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Craig W, Kay R, Cutler RL, Lansdorp PM. Expression of Thy-1 on human hematopoietic progenitor cells. *J Exp Med.* 1993; 177(5):1331-1342. (Biology)

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Lansdorp PM, Thomas TE. AP Gee, ed. *Bone Marrow Processing and Purging.* Boca Raton FL: CRC Press; 1991(Biology)

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