

Antibodies

Anti-Human CD90 Antibody, Clone 5E10

Mouse monoclonal IgG1 antibody
against human, rhesus, cynomolgus
CD90 (Thy-1), unconjugated

Catalog #60045

100 µg 0.5 mg/mL



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Product Description

The 5E10 antibody reacts with CD90 (Thy-1), a GPI-linked membrane glycoprotein that is N-glycosylated at two sites, giving rise to 25 - 37 kDa molecules. CD90 has roles in signal transduction, cell adhesion and migration, neurite outgrowth, T cell activation, tumor suppression, and inhibition of the proliferation and differentiation of hematopoietic stem cells. It is a known ligand of $\beta 2$ and $\beta 3$ integrins and upregulates synthesis of fibronectin, osteonectin, and thrombospondin. CD90 is broadly expressed, being found on human thymocytes, neurons, some glial cells, fibroblasts, activated endothelial cells, some leukemia cell lines, and a distinct subset (< 1%) of CD3+CD4+ T cells in human peripheral blood. CD90 is also expressed by small subsets of CD34+ cells in fetal liver, umbilical cord blood, bone marrow, and mobilized peripheral blood cells. CD90 is considered an important marker for hematopoietic stem and progenitor cells and, in combination with other markers such as CD34, is useful for identifying and isolating these cells by FACS.

Target Antigen Name:	CD90 (Thy-1)
Alternative Names:	CDw90, Thy-1, Thy1
Gene ID:	7070
Species Reactivity:	Human, Rhesus, Cynomolgus, Baboon, Pigtailed Macaque, Dog, Pig
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	5E10
Isotype:	IgG1, kappa
Immunogen:	Human HEL erythroleukemia cell line
Conjugate:	Unconjugated

Applications

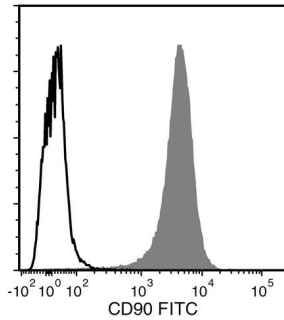
Verified:	FC
Reported:	CyTOF®, FC, ICC, IF, IHC, IP, WB
Special Applications:	This antibody clone has been verified for labeling human mesenchymal cells grown in MesenCult™ Proliferation Kit (Human; Catalog #05411).

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
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	For flow cytometry the suggested use of this antibody is $\leq 1 \mu\text{g}$ per 1×10^6 cells in 100 µL or per 100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human erythroleukemia (HEL) cells labeled with Anti-Human CD90 Antibody, Clone 5E10, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (filled histogram), or a mouse IgG1, kappa isotype control antibody, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, 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, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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