

Purified anti-human CD90 (Thy1) (Maxpar[®] Ready) Antibody

Catalog# / Size	328129 / 100 µg
Clone	5E10
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	Thy-1, Thy1
Isotype	Mouse IgG1, κ
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.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Pigtailed Macaque, Rhesus, Pig
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	HEL cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and EDTA.
Preparation	The antibody was purified by affinity chromatography.
Concentration	1.0 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested CyTOF[®] - Verified
Recommended Usage	This product is suitable for use with the Maxpar[®] Metal Labeling Kits . For metal labeling using Maxpar [®] Ready antibodies, proceed directly to the step to Partially Reduce the Antibody by adding 100 µl of Maxpar [®] Ready antibody to 100 µl of 4 mM TCEP-R in a 50 kDa filter and continue with the protocol. Always refer to the latest version of Maxpar [®] User Guide when conjugating Maxpar [®] Ready antibodies.
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, immunoprecipitation ¹ , and immunofluorescence ³ .
Additional Product Notes	Maxpar [®] is a registered trademark of Standard BioTools Inc.
Application References	1. Craig W, <i>et al.</i> 1993. <i>J. Exp. Med.</i> 177:1331. (IP) 2. Gundlach CW 4th, <i>et al.</i> 2011. <i>Bioconjug. Chem.</i> 22:1706. (Pig Reactivity) 3. Touboul C, <i>et al.</i> 2013. <i>J. Transl. Med.</i> 11:28. (IF) 4. Bradley JE, <i>et al.</i> 2013. <i>Lab Invest.</i> 93:365. (Epitope) 5. Donnenberg VS, <i>et al.</i> 2010. <i>Cytometry B. Clin. Cytom.</i> 5:287. (IHC)
(PubMed link indicates BioLegend citation)	
RRID	AB_2562832 (BioLegend Cat. No. 328129)

Antigen Details

Structure	25-35 kD glycoprotein, Ig superfamily
Distribution	Subset of CD34 ⁺ hematopoietic stem cells, subset of fetal thymocytes, subset of fetal liver cells, fibroblast, activated endothelial cells, neurons and some leukemia cell lines
Function	Regulate hematopoiesis and neural cell growth, cell adhesion
Ligand/Receptor	$\beta 3$ integrin, $\beta 2$ integrin
Cell Type	Endothelial cells, Fibroblasts, Hematopoietic stem and progenitors, Leukemia, Mesenchymal Stem Cells, Neurons, Thymocytes
Biology Area	Immunology, Stem Cells
Molecular Family	CD Molecules
Antigen References	1. McKenzie JL, <i>et al.</i> 1981. <i>J. Immunol.</i> 126:843. 2. Avalos AM, <i>et al.</i> 2002. <i>Biol. Res.</i> 35:231. 3. Wetzel A, <i>et al.</i> 2004. <i>J. Immunol.</i> 172:3850.
Gene ID	7070

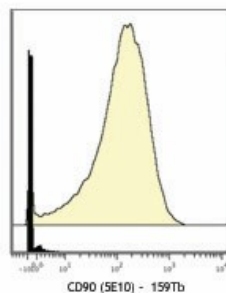
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Cyanine7 anti-human CD90 (Thy1), Purified anti-human CD90 (Thy1), Biotin anti-human CD90 (Thy1), FITC anti-human CD90 (Thy1), PE anti-human CD90 (Thy1), PE/Cyanine5 anti-human CD90 (Thy1), APC anti-human CD90 (Thy1), Alexa Fluor® 647 anti-human CD90 (Thy1), PerCP/Cyanine5.5 anti-human CD90 (Thy1), Alexa Fluor® 700 anti-human CD90 (Thy1), Brilliant Violet 421™ anti-human CD90 (Thy1), Brilliant Violet 510™ anti-human CD90 (Thy1), Brilliant Violet 605™ anti-human CD90 (Thy1), Purified anti-human CD90 (Thy1) (Maxpar® Ready), APC/Cyanine7 anti-human CD90 (Thy1), PE/Dazzle™ 594 anti-human CD90 (Thy1), APC/Fire™ 750 anti-human CD90 (Thy1), Brilliant Violet 711™ anti-human CD90 (Thy1), TotalSeq™-A0060 anti-human CD90 (Thy1), Brilliant Violet 785™ anti-human CD90 (Thy1), Brilliant Violet 650™ anti-human CD90 (Thy1), TotalSeq™-C0060 anti-human CD90 (Thy1), TotalSeq™-B0060 anti-human CD90 (Thy1), TotalSeq™-D0060 anti-human CD90 (Thy1)

Product Data



Human HEL erythroleukemia cells (top) and human NALM-6 pre-B cells (bottom) stained with 159Tb-anti-CD90 [Thy1] (5E10). Data provided by DVS Sciences.

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