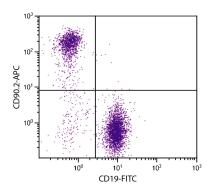
SouthernBiotech



Rat Anti-Mouse CD90.2

Cat. No.	Format	Size
1750-01	Purified (UNLB)	0.5 mg
1750-02	Fluorescein (FITC)	0.5 mg
1750-02S	Fluorescein (FITC)	0.1 mg
1750-08	Biotin (BIOT)	0.5 mg
1750-09	R-phycoerythrin (PE)	0.1 mg
1750-09L	R-phycoerythrin (PE)	0.2 mg
1750-11	Allophycocyanin (APC)	0.1 mg
1750-13	Spectral Red® (SPRD)	0.1 mg
1750-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1750-26	Pacific Blue™ (PACBLU)	0.1 mg
1750-27	Alexa Fluor® 700 (AF700)	0.1 mg
1750-30	Alexa Fluor® 488 (AF488)	0.1 mg
1750-31	Alexa Fluor® 647 (AF647)	0.1 mg



BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD90.2-APC (SB Cat. No. 1750-11) and Rat Anti-Mouse CD19-FITC (SB Cat. No. 1575-02).

Overview

Clone 30-H12

Isotype Rat (LOU/Ws1/M) IgG_{2bк} Immunogen Mouse thymus or spleen

Specificity Mouse CD90.2 (Thy-1.2 alloantigen); Mr 25-30 kDa

Alternate Name(s) Thy-1.2

Description

CD90 (Thy-1) is a GPI-anchored molecule and one of the smallest members of the immunoglobulin superfamily consisting of a single V-set domain. The Thy-1.2 alloantigen is expressed on all thymocytes, peripheral T lymphocytes, and some intraepithelial T cells of most mouse strains. It is also expressed in the brain and at varying levels on other non-lymphoid tissues. The 30-H12 monoclonal antibody does not cross react with mouse and rat strains bearing the Thy-1.1 alloantigen (e.g., AKR/J, PL).

Applications

FC – Quality tested ^{1,2,9,10} IHC-FS – Reported in literature ^{2,3} ICC – Reported in literature ⁴ IP – Reported in literature ¹ Depletion – Reported in literature ^{5,6} Costim – Reported in literature ^{7,8} Apop – Reported in literature ^{7,8}

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	\leq 1 $\mu g/10^6$ cells
	FITC, BIOT, and AF488 conjugates	\leq 1 $\mu g/10^6$ cells
	APC, SPRD, PACBLU, and AF647 conjugates	$\leq 0.2~\mu g/10^6~cells$
	AF700 conjugate	$\leq 0.1~\mu g/10^6~cells$
	PE conjugate	$\leq 0.05~\mu g/10^6~cells$
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL	
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Email: info@southernbiotech.com • Website: www.southernbiotech.com

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No
 preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red[®] (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no
 preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple
 freeze / thaw cycles.
- The Alexa Fluor[®] 488 (AF488), Alexa Fluor[®] 647 (AF647), Alexa Fluor[®] 700 (AF700), and Pacific Blue[™] (PACBLU) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

- Ledbetter JA, Herzenberg LA. Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens. Immunol Rev. 1979;47:63-90. (Immunogen, FC, IP)
- Ledbetter JA, Rouse RV, Micklem HS, Herzenberg LA. T cell subsets defined by expression of Lyt-1,2,3 and Thy-1 antigens. Two-parameter immunofluorescence and cytotoxicity analysis with monoclonal antibodies modifies current views. J Exp Med. 1980;152:280-95. (FC, IHC-FS)
- Folgosa L, Zellner HB, El Shikh ME, Conrad DH. Disturbed follicular architecture in B cell A disintegrin and metalloproteinase (ADAM)10 knockouts is mediated by compensatory increases in ADAM17 and TNF-α shedding. J Immunol. 2013;191:5951-8. (IHC-FS)
- Sharma N, Suzuki H, He Q, Sharma RP. Tumor necrosis factor α-mediated activation of c-Jun NH₂-terminal kinase as a mechanism for fumonisin B₁ induced apoptosis in murine primary hepatocytes. J Biochem Mol Toxicol. 2005;19:359-67. (ICC)
- Sharma N, He Q, Sharma RP. Amelioration of fumonisin B₁ hepatotoxicity in mice by depletion of T cells with anti-Thy-1.2. Toxicology. 2006;223:191-201. (Depletion)
- 6. Stevenson MM, Tam MF. Differential induction of helper T cell subsets during blood-stage Plasmodium chabaudi AS infection in resistant and susceptible mice. Clin Exp Immunol. 1993;92:77-83. (Depletion)
- Nakashima I, Zhang Y, Rahman SM, Yoshida T, Isobe K, Ding L, et al. Evidence of synergy between Thy-1 and CD3/TCR complex in signal delivery to murine thymocytes for cell death. J Immunol. 1991;147:1153-62. (Costim, Apop)
- 8. Nakashima I, Pu M, Hamaguchi M, Iwamoto T, Rahman SM, Zhang Y, et al. Pathway of signal delivery to murine thymocytes triggered by co-crosslinking CD3 and Thy-1 for cellular DNA fragmentation and growth inhibition. J Immunol. 1993;151:3511-20. (Costim, Apop)
- 9. Morecki S, Yacovlev E, Gelfand Y, Eizik O, Slavin S. Pretransplant treatment of donors with immunomodulators to control graft-versus-host disease (GVHD) in transplant recipients. Exp Hematol. 2007;35:748-56. (FC)
- 10. Chaimowitz NS, Martin RK, Cichy J, Gibb DR, Patil P, Kang D, et al. A disintegrin and metalloproteinase 10 regulates antibody production and maintenance of lymphoid architecture. J Immunol. 2011;187:5114-22. (FC)

Spectral Red® is a registered trademark of Southern Biotechnology Associates, Inc.

Spectral Red® is a PE/CY5 tandem conjugate.

Cy™ is a trademark of Cytiva or one of its subsidiaries.

Alexa Fluor® 488, 647, 700 and Pacific Blue™ are provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Southern Biotechnology Associates, Inc., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

TB1750 08-Oct-21

Email: info@southernbiotech.com • Website: www.southernbiotech.com