

## Rat Anti-Mouse CD90.2/Thy-1.2

Cat. No.	Form	Quantity
1750-01	Purified (UNLB) Antibody	0.5 mg
1750-02	Fluorescein (FITC) Conjugate	0.5 mg
1750-02S	Fluorescein (FITC) Conjugate	0.1 mg
1750-08	Biotin (BIOT) Conjugate	0.5 mg
1750-09	R-phycoerythrin (R-PE) Conjugate	0.1 mg
1750-09L	R-phycoerythrin (R-PE) Conjugate	0.2 mg
1750-11	Allophycocyanin (APC) Conjugate	0.1 mg
1750-13	*Spectral Red™ (SPRD) Conjugate	0.1 mg
1750-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg

### DESCRIPTION

**Clone** 30-H12  
**Ig Isotype** Rat (LOU/Ws1) IgG<sub>2b</sub>κ  
**Specificity** Mouse CD90.2/Thy-1.2 alloantigen, Mr 18 kDa

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.<sup>1-3</sup> 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).<sup>2-5</sup>

### RESEARCH APPLICATIONS

- Flow cytometry<sup>4,5</sup>
- Immunohistochemistry (frozen sections)<sup>6</sup>
- *In vivo* and *in vitro* depletion of T cells<sup>7,8</sup>

### CHARACTERIZATION

To insure lot-to-lot consistency, each batch of product is tested by flow cytometry to conform with the characteristics of a standard reference reagent. Representative flow data are included with this product insert.

### WORKING DILUTIONS

<b>Flow Cytometry:</b>	Purified (UNLB) antibody	≤1 µg/10 <sup>6</sup> cells
	Fluorescein (FITC) conjugate	≤1 µg/10 <sup>6</sup> cells
	Biotin (BIOT) conjugate	≤1 µg/10 <sup>6</sup> cells
	R-phycoerythrin (R-PE) conjugate	≤0.2 µg/10 <sup>6</sup> cells
	Spectral Red™ conjugate	≤0.2 µg/10 <sup>6</sup> cells
	Allophycocyanin (APC) conjugate	≤0.2 µg/10 <sup>6</sup> cells

**Other Applications:** Since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need.

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

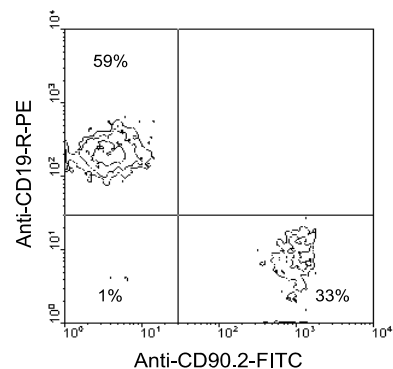
## IMMUNOFLUORESCENT STAINING

**Product:** Rat Anti-Mouse CD90.2-FITC

**Cat. No.** 1750-02

**Amount Used:** 0.3  $\mu\text{g}/10^6$  cells

BALB/c splenocytes were double-stained with rat anti-mouse CD90.2-FITC and rat anti-mouse CD19-R-PE (Cat. No. 1575-09). Small lymphocytes were then gated and analyzed on a FACScan™ flow cytometer (BDIS, San Jose, CA).



## HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of 100 mM 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/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (R-PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN<sub>3</sub> 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/NaN<sub>3</sub> 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/NaN<sub>3</sub> 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. **Aliquot and store at or below -20°C.**
- Protect conjugated forms from light. Aliquot and freeze the low endotoxin, azide-free product at -20°C immediately upon receipt. Each reagent is stable for the period shown on the bottle label if stored as directed.

## WARNING

Reagents contain sodium azide. Sodium azide is very toxic if ingested or inhaled. Avoid contact with skin, eyes, or clothing. Wear eye or face protection when handling. If skin or eye contact occurs, wash with copious amounts of water. If ingested or inhaled, contact a physician immediately. Sodium azide yields toxic hydrazoic acid under acidic conditions. Dilute azide-containing compounds in running water before discarding to avoid accumulation of potentially explosive deposits in lead or copper plumbing.

## REFERENCES

1. Homans, S.W., et al. 1988. *Nature* 333:269.
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3. Williams, A.F. 1989. In: *Cell Surface Antigen Thy-1* (A.E. Reif and M. Schlesinger, eds) Marcel Dekker, New York, pp. 49-69.
4. Ledbetter, J.A., et al. 1980. *J. Exp. Med.* 152:280.
5. Ledbetter, J.A., and L.A. Herzenberg. 1979. *Immunol. Rev.* 47:63.
6. Southern Biotechnology Associates, Inc. 1997. Unpublished observations.
7. Hathcock, K.S. 1991. In: *Current Protocols in Immunology* (J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, and W. Strober, eds) John Wiley & Sons, New York, NY, pp. 3.4.1-3.4.3.
8. Kruisbeek, A.M. 1991. In: *Current Protocols in Immunology* (J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, and W. Strober, eds) John Wiley & Sons, New York, NY, pp. 4.1.1-4.1.5.

FACScan™ is a registered trademark of Becton Dickinson Immunocytometry Systems, Inc., San Jose, CA.

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

\*Spectral Red™ is a PE/Cy™5 tandem conjugate. Cy™5 is a trademark of Amersham Biosciences Corp.. Cy™5 is for non-commercial research use only, not for therapeutic or in vivo applications. Other use needs license from Amersham Biosciences Corp., under U.S. Patent Nos. 4,981,977 and 5,268,486 and other patents pending. This material (or portions of this material) is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp.. This product is licensed for sale only for research. It is not licensed for any other use. There is no implied license hereunder for any commercial use. Commercial Use shall include: 1. sale, lease, license or other transfer of the material or any material derived or produced from it. 2. sale, lease, license or other grant of rights to use this material or any material derived or produced from it. 3. Use of this material to perform services for a fee for third parties. If you require a commercial license to use this material and do not have one, return this material, unopened to Southern Biotechnology, 160A Oxmoor Blvd, Birmingham, AL 35209, USA and any money paid for the material will be refunded.