

# Technical Data Sheet

## FITC Rat Anti-Mouse CD90.2

### Product Information

<b>Material Number:</b>	553012
<b>Alternate Name:</b>	Thy-1.2
<b>Size:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	30-H12
<b>Immunogen:</b>	Mouse Thymus / Spleen
<b>Isotype:</b>	Rat (LOU) IgG2b, $\kappa$
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

### Description

The 30-H12 clone has been reported to react with the CD90.2 (Thy-1.2) alloantigen on thymocytes, most peripheral T lymphocytes, some intraepithelial T lymphocytes (IEL, DEC), epithelial cells, fibroblasts, neurons, hematopoietic stem cells, but not B lymphocytes, of most mouse strains. Thy-1.2 has also been initially reported to be detectable on thymic dendritic cells, but later revealed that the antigen was probably picked up from T-lineage cells. 30-H12 mAb has been reported not to cross-react with Thy-1.1 (e.g., AKR/J, PL), or with rat Thy-1. CD90 is a GPI-anchored membrane glycoprotein of the Ig superfamily which is involved in signal transduction. In addition, there is evidence that CD90 mediates adhesion of thymocytes to thymic stroma. It has been reported that crosslinked 30-H12 antibody induces  $\text{Ca}^{2+}$  influx into thymocytes and that co-crosslinking of 30-H12 mAb with antibody to the CD3/TCR complex intensifies thymocyte signal transduction, promotes apoptosis of thymocytes, and inhibits the CD3-mediated proliferative response of mature T lymphocytes.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

### Preparation and Storage

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. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

### Application Notes

#### Application

Flow cytometry	Routinely Tested
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### Suggested Companion Products

Catalog Number	Name	Size	Clone
553988	FITC Rat IgG2b, $\kappa$ Isotype Control	0.25 mg	A95-1

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
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.

### References

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