

## Anti-Mouse CD90.2 FITC

Catalogue Number : 03012-50

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** 30-H12

**Format/Conjugate:** FITC

**Concentration:** 0.5 mg/mL

**Reactivity:** Mouse

**Laser:** Blue (488nm)

**Peak Emission:** 520nm

**Peak Excitation:** 494nm

**Filter:** 530/30

**Brightness (1=dim,5=brightest):** 3

**Isotype:** Rat IgG2b

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The 30-H12 monoclonal antibody specifically binds to MouseCD90.2, an alloantigen known as Thy-1.2, expressed on thymocytes, mature T cells, epithelial cells, neurons, hematopoietic stem cells, and fibroblasts. CD90 is a membrane glycoprotein that regulates the adhesion and signal transduction in T lymphocytes, and the adhesion of thymocytes to thymic stroma.

The interaction between 30-H12 and the antibody to the CD3/TCR complex upregulates thymocytes signal transduction and apoptosis and downregulates mature T cell proliferation. The 30-H12 antibody seems to be unable to cross-link with CD90.1.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.125 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

### References

- 1.Ledbetter, J. A., ; Herzenberg, L. A. (1979). Xenogeneic Monoclonal Antibodies to Mouse Lymphoid Differentiation Antigens\*.Immunological reviews,;47(1), 63-90.
2. Radrizzani, M., Carminatti, H., Pivetta, O. H., ; Vargas, V. P. (1995). Developmental regulation of Thy 1.2 rate of synthesis in the mouse cerebellum.Journal of neuroscience research,;42(2), 220-227.
3. Seaman, W. E., Wofsy, D., Greenspan, J. S., ; Ledbetter, J. A. (1983). Treatment of autoimmune MRL/lpr mice with monoclonal antibody to Thy-1.2: a single injection has sustained effects on lymphoproliferation and renal disease.The Journal of Immunology,;130(4), 1713-1718.