

Anti-Mouse CD28 Purified

Catalog Number: 14-0281 RUO: For Research Use Only



Staining of BALB/c thymocytes with 0.25 μ g of Golden Syrian Hamster IgG Isotype Control Purified (cat. 14-4914) (open histogram) or 0.25 μ g of Anti-Mouse CD28 Purified (filled histogram) followed by Anti-Syrian Hamster IgG FITC (cat. 11-4211). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse CD28 Purified REF Catalog Number: 14-0281 Clone: 37.51 Concentration: 0.5 mg/ml Host/Isotype: Golden Syrian Hamster IgG Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

- Temperature Limitation: Store at 2-8°C.
- LOT Batch Code: Refer to Vial
- Use By: Refer to Vial
- / Caution, contains Azide

Description

The 37.51 monoclonal antibody reacts with the mouse CD28 molecule, a 45 kDa homodimer expressed by thymocytes, mature T cells and NK cells. CD28 is a ligand for CD80 (B7-1) and CD86 (B7-2) and is a potent costimulator of T cells. Signaling through CD28 augments IL-2 and IL-2 receptor expression as well as cytotoxicity of CD3-activated T cells.

Applications Reported

The 37.51 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining. 37.51 has also been reported in costimulation of T cells *in vitro* and *in vivo*. (Please use Functional Grade purified 37.51, cat. 16-0281, in functional assays.)

Applications Tested

The 37.51 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 0.5 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Note: It has been observed that increased incubations times (30-45 minutes) with the CD28 antibody can enhance the staining obtained.

References

Nandi, D., J. A. Gross, et al. (1994). "CD28-mediated costimulation is necessary for optimal proliferation of murine NK cells." <u>J Immunol</u> 152(7): 3361-9.

Gross, J. A., E. Callas, et al. (1992). "Identification and distribution of the costimulatory receptor CD28 in the mouse." <u>J Immunol</u> 149(2): 380-8. Harding, F. A., J. G. McArthur, et al. (1992). "CD28-mediated signalling co-stimulates murine T cells and prevents induction of anergy in T-cell clones." <u>Nature</u> 356(6370): 607-9.

Gross, J. A., T. St. John, et al. (1990). "The murine homologue of the T lymphocyte antigen CD28. Molecular cloning and cell surface expression." J Immunol 144(8): 3201-10.

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