

# Anti-Mouse CD28 SAFIRE Purified

Catalog Number: 10312-25

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

#### **Product Information**

**Clone:** 37.51

Format/Conjugate: SAFIRE Purified

Concentration: 2 mg/mL

**Reactivity:** Mouse **Laser:** Not Applicable

**Peak Emission:** Not Applicable **Peak Excitation:** Not Applicable

Filter: Not Applicable

Brightness (1=dim,5=brightest): Not Applicable

Isotype: Golden Syrian Hamster IgG

Formulation: Phosphate-buffered aqueous solution, ph7.2.

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

Applications: FC, FA, IP

#### **Description**

The 37.51 monoclonal antibody specifically reacts with mouse CD28 molecule, a 45 kDa homodimer. It is expressed on most thymocytes, at low density on most of the CD4+ and CD8+ peripheral T lymphocytes, and on the natural killer cells. It is additionally found on activated splenocytes, mast cells, and thymocytes. CD 28 is a costimulator of T lymphocytes and a ligand for CD80 (B7-1), and CD86 (B7-2). The CD28 signaling stimulates the expression of IL-2 and IL-2 receptor and the cytotoxicity of CD3-activated T lymphocytes.

The 37.51 antibody stimulates the proliferation of T lymphocytes and natural killer cells and their respective cytokine production.

## **Preparation & Storage**

The product should be stored undiluted at  $4^{\circ}$ C. Do not freeze. The monoclonal antibody was purified utilizing affinitychromatography. The endotoxin level is determined by LAL test to be less than  $0.01 \text{ EU/}\mu\text{g}$  of the protein.

## **Application Notes**

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. It is recommended that the reagent be titrated for optimal performance for each application.

## References

- 1.Nandi, D., Gross, J. A., Allison, J. P. (1994). CD28-mediated costimulation is necessary for optimal proliferation of murine NK cells.; The Journal of Immunology,;152(7), 3361-3369.
- 2. Gross, J. A., Callas, E. L. E. N. I., Allison, J. P. (1992). Identification and distribution of the costimulatory receptor CD28 in the mouse.; The Journal of Immunology,;149(2), 380-388.
- 3. Grossi, J. A., Raulet, D. H., Allison, J. P. (1992). CD28-mediated signalling co-stimulates murine T cells and prevents induction of anergy in T-cell clones. Nature,;356, 607-9.

4. Nishio, M., Spielman, J., Lee, R. K., Nelson, D. L., Podack, E. R. (1996). CD80 (B7. 1) and CD54 (intracellular adhesion molecule-1) induce target cell susceptibility to promiscuous cytotoxic T cell lysis.;The Journal of Immunology,157(10), 4347-4353.	
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