

Anti-Mouse CD28 PE

Catalogue Number : 10312-60

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

Product Information

Clone: 37.51

Format/Conjugate: PE

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Blue (488nm), Yellow/Green (532-561nm)

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

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

Isotype: Golden Syrian Hamster IgG

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 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°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 ≤0.5 ug per million cells in 100 µl volume. 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. 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.