

Anti-Human CD28 PE-Cyanine7

Catalog Number :10311-77

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

Product Information

Clone: CD28.2

Format/Conjugate: PE-Cyanine7

Concentration: 5 uL (0.25 ug)/test

Reactivity: Human

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

Peak Emission: Not Applicable

Peak Excitation: Not Applicable

Filter: Not Applicable

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

Isotype: Mouse IgG1, kappa

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 CD28.2 monoclonal antibody specifically binds with the human 44 kDa homodimeric trans-membrane glycoprotein CD28, expressed on the surface of most mature T lymphocytes, plasma cells, and thymocytes. CD28 is a ligand for B7-1 (CD80) and B7-2 (CD86), a co-stimulator of T lymphocytes, and enhances the interaction between T and B lymphocytes. It has been reported that the T lymphocytes stimulation to produce IL-2 depends on the monoclonal antibody involved, which suggests that the CD28 molecule presents some subregions with distinct functions. The CD28.2 antibody induces Ca²⁺ influx in Jurkat T lymphocytes. Other studies have shown that CD28 is involved in the signal transduction.

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. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

References

- Schlossman, S., L. Bloumsell, et al. eds (1995). Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. New York
- Nunès, J., Klasen, S., Ragueneau, M., Pavon, C., Couez, D., Mawas, C., ... Olive, D. (1993). CD28 mAbs with distinct binding properties differ in their ability to induce T cell activation: analysis of early and late activation events. *International immunology*, 5(3), 311-315.
- Karlsson, I., Malleret, B., Brochard, P., Delache, B., Calvo, J., Le Grand, R., Vaslin, B. (2007). FoxP3+ CD25+ CD8+ T-cell induction during primary simian immunodeficiency virus infection in cynomolgus macaques correlates with low CD4+ T-cell activation and high viral load. *Journal of virology*, 81(24), 13444-13455.