

## Anti-Human CD28 PerCP-Cyanine5.5

Catalogue Number : 10311-70

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

### Product Information

**Clone:** CD28.2

**Format/Conjugate:** PerCP-Cyanine5.5

**Concentration:** 5 uL (0.125 ug)/test

**Reactivity:** Human

**Laser:** Blue (488nm)

**Peak Emission:** 695nm

**Peak Excitation:** 482nm

**Filter:** 695/40

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

**Isotype:** MouseIgG1, 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 Ca<sup>2+</sup> 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
- Nun&grave;s, 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.