

Anti-Human CD28 SAFIRE Purified

Catalog Number: 10311-25

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

Product Information

Clone: CD28.2

Format/Conjugate: SAFIRE Purified

 $\textbf{Concentration:} \ 2 \ mg/mL$

Reactivity: Human
Laser: Not Applicable

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, ph7.2.

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

Applications: FC, FA, IHC, IP

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. 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. Schlossman, S., L. Bloumsell, et al. eds (1995). Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. New York
- 2. 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.
- 3. 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.