

Anti-Human CD86 (B7-2) PE-Cyanine5

Catalog Number :08911-65

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

Product Information

Clone: IT2.2

Format/Conjugate: PE-Cyanine5

Concentration: 5 uL (0.25 ug)/test

Reactivity: Human

Laser: Blue (488nm)

Peak Emission: Not Applicable

Peak Excitation: Not Applicable

Filter: Not Applicable

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

Isotype: Mouse IgG2b, 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 IT2.2 antibody reacts with human CD86, also known as B7-2, an 80 kDa cell surface protein which is a ligand for CD28, a co-stimulatory receptor for the T cell receptor (TCR). CD28 can also bind a second B7 ligand known as CD80 (B7-1). Both CD80 and CD86 are expressed on activated B cells and antigen-presenting cells. These ligands trigger CD28 signaling in concert with TCR activation to drive T cell proliferation, induce high-level expression of IL-2, impart resistance to apoptosis, and enhance T cell cytotoxicity. The interaction / co-stimulatory signaling between the B7 ligands and CD28 provides crucial communication between T cells and B cells or APCs to coordinate the adaptive immune response.

The IT2.2 antibody may be used as a marker for CD86 expression on B cells, macrophages, and dendritic cells. It is reported to be cross-reactive with Rhesus, Cynomolgus and Common marmoset CD86.

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

1. Knapp W; (1989) Leucocyte typing IV: white cell differentiation antigens. Oxford University Press, 1989.
2. Azuma, M., Ito, D., Yagita, H., Okumura, K., Phillips, J. H., Lanier, L. L., Somoza, C. (1993). B70 antigen is a second ligand for CTLA-4 and CD28. Nature, 366(6450), 76-79.
3. Leucocyte Typing VI: White Cell Differentiation Antigens: Proceedings of the Sixth International Workshop and Conference Held in Kobe, Japan,

