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Technical Data Sheet

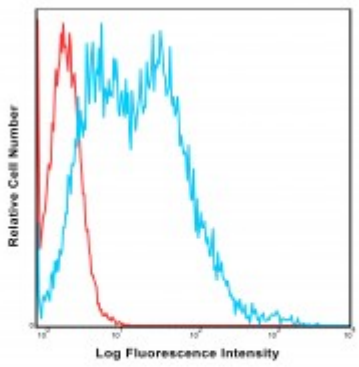
Anti-Mouse CD80 (B7-1) PE

Catalogue Number : 02912-60

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

Product Information

Clone: 16-10A1
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: Armenian 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



C57Bl/6 splenocytes were stained with PE 16-10A1 with relevant isotype control in Red.

Description

The 16-10A1 antibody reacts with mouse CD80, also known as B7-1, a 55 kDa type I transmembrane protein ligand for CD152 (CTLA-4) and for CD28, a co-stimulatory receptor for the T cell receptor (TCR). CD28 also binds a second B7 ligand known as CD86 (B7-2). 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 or CTLA-4 provides crucial communication between T cells and B cells or APCs to coordinate the adaptive immune response.

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 ≤0.125 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1.Razi-Wolf, Z., Freeman, G. J., Galvin, F., Benacerraf, B., Nadler, L., Reiser, H. (1992). Expression and function of the murine B7 antigen, the major costimulatory molecule expressed by peritoneal exudate cells.;Proceedings of the National Academy of Sciences,;89(9), 4210-4214.

2. Hathcock, K. S., Laszlo, G., Pucillo, C., Linsley, P., Hodes, R. J. (1994). Comparative analysis of B7-1 and B7-2 costimulatory ligands: expression and function.;The Journal of experimental medicine,;180(2), 631-640.

3. Harlan, D. M., Hengartner, H., Huang, M. L., Kang, Y. H., Abe, R., Moreadith, R. W., ... Freeman, G. J. (1994). Mice expressing both B7-1 and viral glycoprotein on pancreatic beta cells along with glycoprotein-specific transgenic T cells develop diabetes due to a breakdown of T-lymphocyte unresponsiveness.;Proceedings of the National Academy of Sciences,;91(8), 3137-3141.

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