Enabling Science through Innovation

Technical Data Sheet

Anti-Rat CD80 (B7-1) PE

Catalog Number :02913-60

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

Product Information

Clone: 3H5

Format/Conjugate: PE

Concentration: 0.2 mg/mL

Reactivity: Rat

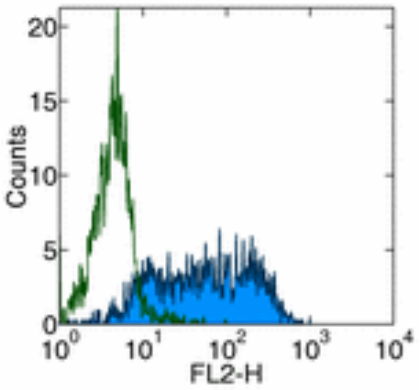
Laser: Blue (488nm), Yellow/Green (532-561nm)

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

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



Rat LPS-stimulated splenocytes were stained with PE 3H5 with autofluorescent cells in green.

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 3H5 monoclonal 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.

The 3H5 antibody block the binding of CD80 to its ligands.

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.Damoiseaux, J. G., Yagita, H., Okumura, K., van Breda Vriesman, P. J. (1998). Costimulatory molecules CD80 and CD86 in the rat; tissue distribution and expression by antigen-presenting cells.;Journal of leukocyte biology,;64(6), 803-809.

2. Maeda, K., Sato, T., Azuma, M., Yagita, H., Okumura, K. (1997). Characterization of rat CD80 and CD86 by molecular cloning and mAb.International

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3. Bluestone, J. A. (1995). New perspectives of CD28-B7-mediated T cell costimulation.;Immunity,;2(6), 555-559.