

Anti-Mouse NK1.1 (CD161) PE

Catalogue Number : 83712-60

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

Product Information

Clone: PK136

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: Mouse IgG2a, 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 PK136 monoclonal antibody is specific for the mouse NK1.1, a receptor from the killer cell lectin-like receptor (KLR) family. Nk1.1 is an antigen encoded by the Klrb1c/NKR-P1C gene expressed by the natural killer cells of some selected strains of mice (C57BL, FVB/N, NZB) and encoded by the Klrb1b/NKR-P1B gene expressed on Swiss NIH and SJL mice. Pk136 binds to an epitope common to NKR-P1B and NKR-P1C.

The Klrb1 is a family of type II transmembrane C-type lectin receptors. Klrb1c activates the NK-cell cytotoxicity, while Klrb1b inhibits it.

PK136 is useful in defining the NK cells and the rare population of NK-T lymphocytes and specific cultured monocytes.

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 ≤0.5 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Koo, G. C., ; PEPPARD, J. R. (1984). Establishment of monoclonal anti-Nk-1.1 antibody.; Hybridoma.; 3(3), 301-303.
2. Carlyle, J. R., Martin, A., Mehra, A., Attisano, L., Tsui, F. W., ; Zucchi, R., ; & Miller, J. C. (1999). Mouse NKR-P1B, a novel NK1.1 antigen with inhibitory function.; The Journal of Immunology.; 162(10), 5917-5923.
3. Karlhofer, F. M., ; Yokoyama, W. M. (1991). Stimulation of murine natural killer (NK) cells by a monoclonal antibody specific for the NK1.1 antigen. IL-2-activated NK cells possess additional specific stimulation pathways.; The Journal of Immunology.; 146(10), 3662-3673.