

## Anti-Mouse NK1.1 Biotin

Catalog Number :83712-30

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

### Product Information

**Clone:** PK136

**Format/Conjugate:** Biotin

**Concentration:** 0.5 mg/mL

**Reactivity:** Mouse

**Laser:** Not Applicable

**Peak Emission:** Not Applicable

**Peak Excitation:** Not Applicable

**Filter:** Not Applicable

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

**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 Klrk1c/NKR-P1C gene expressed by the natural killer cells of some selected strains of mice (C57BL, FVB/N, NZB) and encoded by the Klrk1b/NKR-P1B gene expressed on Swiss NIH and SJL mice. Pk136 binds to an epitope common to NKR-P1B and NKR-P1C.

The Klrk1 is a family of type II transmembrane C-type lectin receptors. Klrk1c activates the NK-cell cytotoxicity, while Klrk1b 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 ≤0.25 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., Zúñiga-Pflücker, 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.