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Technical Data Sheet

Anti-Mouse CD314 (NKG2D) PE

Catalog Number :35312-60

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

Product Information

Clone: CX5

Format/Conjugate: PE

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Blue (488nm)

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

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

Isotype: Rat 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 CX5 monoclonal antibody specifically binds to mouse CD314 (NKG2D), a transmembrane C-type lectin-like receptor. CD314 recognizes proteins that appear on the surface of infected, malignant, and transformed cells from MIC and RAET1/ULBP families. These CD314 ligands are absent or present at only low levels on the surface of normal cells. It serves as an activating receptor on NK cells and functions as a co-stimulatory signal on CD8 positive T cells. The CX5 antibody is reported to block the binding of ligands to the CD314 receptor.

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.Ogasawara, K., Benjamin, J., Takaki, R., Phillips, J. H., Lanier, L. L. (2005). Function of NKG2D in natural killer cell;mediated rejection of mouse bone marrow grafts.;Nature immunology,;6(9), 938-945.

2. Cerwenka, A., Bakker, A. B., McClanahan, T., Wagner, J., Wu, J., Phillips, J. H., Lanier, L. L. (2000). Retinoic acid early inducible genes define a ligand family for the activating NKG2D receptor in mice.;Immunity,;12(6), 721-727.

3. Diefenbach, A., Jamieson, A. M., Liu, S. D., Shastri, N., Raulet, D. H. (2000). Ligands for the murine NKG2D receptor: expression by tumor cells and activation of NK cells and macrophages.;Nature immunology,;1(2), 119-126.

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