

## Anti-Human CD314 (NKG2D) PE

Catalog Number :35311-60

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

### Product Information

**Clone:** 1D11

**Format/Conjugate:** PE

**Concentration:** 5 uL (0.125 ug)/test

**Reactivity:** Mouse

**Laser:** Blue (488nm)

**Peak Emission:** 578nm

**Peak Excitation:** 496nm

**Filter:** 585/40

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

**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 1D11 monoclonal antibody specifically binds to human CD314 (NKG2D), a transmembrane C-type lectin-like receptor. CD314 recognizes proteins that appear on the surface of NK cells and T cell subtypes. CD314 is a major recognition receptor for the detection and elimination of transformed and infected cells as its ligands are induced during cellular stress. The 1D11 antibody is reported to block the binding of soluble MICA to gamma delta TCR T cell clones and inhibit lysis by these cells.

### 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. Domogala, A., Blundell, M., Thrasher, A., Lowdell, M. W., Madrigal, J. A., Saudemont, A. (2017). Natural killer cells differentiated in vitro from cord blood CD34+ cells are more advantageous for use as an immunotherapy than peripheral blood and cord blood natural killer cells.; *Cytotherapy*;19(6), 710-720.
2. Warren, H. S. (2005). The eighth human leucocyte differentiation antigen (HLDA8) workshop: Natural killer cell section report.; *Cellular immunology*;236(1-2), 17-20.
3. Burt, B. M., Plitas, G., Nguyen, H. M., Stableford, J. A., Bamboat, Z. M., DeMatteo, R. P. (2008). Circulating HLA-DR+ natural killer cells have potent lytic ability and weak antigen-presenting cell function.; *Human immunology*;69(8), 469-474.