

1P-727-T025

Monoclonal Antibody to CD94 Phycoerythrin (PE) conjugated (25 tests)

Clone: HP-3D9

Isotype: Mouse IgG1

Specificity: The mouse monoclonal antibody HP-3D9 recognizes CD94, a 70 kDa type II transmembrane glycoprotein expressed on NK cells, NK-T cells, and subsets of CD8+ T cells and gamma/delta T cells. HLDA V; WS Code NK82

Regulatory Status: RUO

Immunogen: Cultured human NK cells

Species Reactivity: Human

- **Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
- **Storage Buffer:** The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 10 μ l reagent / 100 μ l of whole blood or 10⁶ cells in a suspension. The content of a vial (0.25 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD94, also known as KLRD1 (killer cell lectin-like receptor D1), is a transmembrane glycoprotein of the C-type lectin family, which forms disulfide-linked heterodimers with NKG2A, B, C, E, H proteins, constituting functionally distinct receptors of NK cells and related cell types. CD94/NKG2A and CD94/NKG2B heterodimers serve as inhibitory, whereas CD94/NKG2C and CD94/NKG2E as activating receptors. The ligand for CD94/NKG2 complexes has been identified as HLA-E. Extent of CD94 expression on NK cell surface can be used to demonstrate their progress through the differentiation process.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

References:

*Romero P, Ortega C, Palma A, Molina IJ, Peña J, Santamaría M: Expression of CD94 and NKG2 molecules on human CD4(+) T cells in response to CD3-mediated stimulation. J Leukoc Biol. 2001 Aug;70(2):219-24.

*Wada H, Matsumoto N, Maenaka K, Suzuki K, Yamamoto K: The inhibitory NK cell receptor CD94/NKG2A and the activating receptor CD94/NKG2C bind the top of HLA-E through mostly shared but partly distinct sets of HLA-E residues. Eur J Immunol. 2004 Jan;34(1):81-90.

*Yu J, Mao HC, Wei M, Hughes T, Zhang J, Park IK, Liu S, McClory S, Marcucci G, Trotta R, Caligiuri MA: CD94 surface density identifies a functional intermediary between the CD56bright and CD56dim human NK-cell subsets. Blood. 2010 Jan 14;115(2):274-81

*Phillips JH, Chang C, Mattson J, Gumperz JE, Parham P, Lanier LL: CD94 and a novel associated protein (94AP) form a NK cell receptor involved in the recognition of HLA-A, HLA-B, and HLA-C allotypes. Immunity. 1996 Aug;5(2):163-72.

*Seo N, Tokura Y, Ishihara S, Takeoka Y, Tagawa S, Takigawa M: Disordered expression of inhibitory receptors on the NK1-type natural killer (NK) leukaemic cells from patients with hypersensitivity to mosquito bites. Clin Exp Immunol. 2000 Jun;120(3):413-9.

*Hallermalm K, Seki K, De Geer A, Motyka B, Bleackley RC, Jager MJ, Froelich CJ, Kiessling R, Levitsky V, Levitskaya J: Modulation of the tumor cell phenotype by IFN-gamma results in resistance of uveal melanoma cells to granule-mediated lysis by cytotoxic lymphocytes. J Immunol. 2008 Mar 15;180(6):3766-74.

*Bovenschen HJ, Van De Kerkhof PC, Gerritsen WJ, Seyger MM: The role of lesional T cells in recalcitrant psoriasis during infliximab therapy. Eur J Dermatol. 2005 Nov-Dec;15(6):454-8.

*Ntrivalas EI, Kwak-Kim JY, Gilman-Sachs A, Chung-Bang H, Ng SC, Beaman KD, Mantouvalos HP, Beer AE: Status of peripheral blood natural killer cells in women with recurrent spontaneous abortions and infertility of unknown aetiology. Hum Reprod. 2001 May;16(5):855-61.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

For laboratory research only, not for drug, diagnostic or other use.