

TECHNICAL DATA SHEET

CyFlow™ CD94 FITC **Anti-Hu; Clone HP-3D9**

REF CN818854

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD94
Alternative Names	Kp43
Clone	HP-3D9
Clonality	monoclonal
Format	FITC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Cultured human NK cells

Specificity

The mouse monoclonal antibody HP-3D9 recognizes CD94 antigen, 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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

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

Background Information

CD94 (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.

References

- 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. < PMID: 8769479 >
- 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. < PMID: 10844517 >
- 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. < PMID: 11331628 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- 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. < PMID: 11493613 >
- 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. < PMID: 14971033 >
- 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. < PMID: 16280298 >
- 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. < PMID: 18322182 >
- 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. < PMID: 19897577 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com