

TECHNICAL DATA SHEET

CyFlow™ CD161 PE Anti-Rt; Clone 10/78



CQ753812

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

Specifications

Antigen	CD161
Alternative Names	NKR-P1A, NKRP1A, NKR
Clone	10/78
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Rat
Negative Species Reactivity	_
Quantity [Concentration]	0.1 mg [0.5 mg/ml]
Immunogen	Splenic cells purified from the LEW rat

Specificity

The mouse monoclonal antibody 10/78 recognizes CD161 antigen, an approximately 30 kDa type II transmembrane C-type lectin receptor, expressed on the plasma membrane of NK cells, dendritic cells,

Contact Information:

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

Rev 1.0 Date: 2016-05-26 EN CyFlow™ CD161 PE



activated monocytes and a subset of T cells as a disulphide-linked homodimer. A common epitope on rat CD161a and b isoforms is detected.

Application

The reagent is designed for Flow Cytometry analysis. Working concentrations should be determined by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in 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

CD161 (Nkrp1; natural killer receptor protein 1 or Klrb1; killer cell lectin-like receptor subfamily b member 1) is a disulphide-linked homodimeric receptor, which is involved in regulation of NK cell and NKT cell function. It is expressed on rat NK cells, subset of T cells, dendritic cells, and activated monocytes. Although human CD161 is expressed as one isoform, the rat CD161 has three isoforms, referred to as CD161a, b, and c. These proteins contain C-terminal C-type lectin extracellular domain, a transmembrane domain, and N-terminal intracellular domain, which contains ITIM motif, such as CD161b, and displays inhibitory function, or does not contain ITIM motif, thus also not the inhibitory function, such as CD161a.

References

- Sedgwick JD, Ford AL, Foulcher E, Airriess R: Central nervous system microglial cell activation and proliferation follows direct interaction with tissue-infiltrating T cell blasts. J Immunol. 1998 Jun 1; 160(11):5320-30. < PMID: 9605131 >
- Tliba O, Chauvin A, Le Vern Y, Boulard C, Sbille P: Evaluation of the hepatic NK cell response during the early phase of Fasciola hepatica infection in rats. Vet Res. 2002 May-Jun; 33(3):327-32.
 < PMID: 12056483 >

Contact Information:

Rev 1.0 Date: 2016-05-26 EN CyFlow™ CD161 PE



- May E, Dorris ML, Satumtira N, Iqbal I, Rehman MI, Lightfoot E, Taurog JD: CD8 alpha beta T cells are not essential to the pathogenesis of arthritis or colitis in HLA-B27 transgenic rats. J Immunol. 2003 Jan 15; 170(2):1099-105. < PMID: 12517979 >
- Stephens LA, Barclay AN, Mason D: Phenotypic characterization of regulatory CD4+CD25+ T cells in rats. Int Immunol. 2004 Feb; 16(2):365-75. < PMID: 14734622 >
- Chang CJ, Tai KF, Roffler S, Hwang LH: The immunization site of cytokine-secreting tumor cell vaccines influences the trafficking of tumor-specific T lymphocytes and antitumor efficacy against regional tumors. J Immunol. 2004 Nov 15; 173(10):6025-32. < PMID: 15528337 >
- Teshima R, Nakamura R, Nakamura R, Hachisuka A, Sawada JI, Shibutani M: Effects of exposure to decabromodiphenyl ether on the development of the immune system in rats. J Health Sci. 2008; 54(4):382-389. < No PMID >
- Kraszula L, Eusebio M, Kupczyk M, Kuna P, Pietruczuk M: The use of multi-color flow cytometry for identification of functional markers of nTregs in patients with severe asthma. Pneumonol Alergol Pol. 2012; 80(5):389-401. < PMID: 22926900 >

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

Contact Information:

Rev 1.0 Date: 2016-05-26 EN CyFlow™ CD161 PE