

## TECHNICAL DATA SHEET

### CyFlow™ CD161 PE Anti-Rt; Clone 10/78

**REF** CQ753812



Sysmex Partec GmbH  
Arndtstraße 11 a-b  
02826 Görlitz  
Germany  
Tel.: +49 3581 8746 0  
E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)  
[www.sysmex-partec.com](http://www.sysmex-partec.com)

Distributed in the U.S.A. and Canada by:  
**Sysmex America, Inc.**  
577 Aptakisic Road  
Lincolnshire, IL 60069, U.S.A.  
Tel.: 1-888-879-7639 or 1-847-367-3503  
E-mail: [cytometry@sysmex.com](mailto:cytometry@sysmex.com)  
<https://us.sysmex-flowcytometry.com/>

**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, 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  $\approx$ 7.4, containing 0.09% (w/v) sodium azide.

## Storage and Stability

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	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.

## Warnings











**Non-Hazardous Statement:** This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.

**Safety Data Sheet Statement:** Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at <http://www.sysmex-partec.com/services>, or at <https://us.sysmex-flowcytometry.com/> (U.S. customers only).

## References

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- 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 >

## Symbols

	Reference number		Contains sufficient for <n> tests
	For research use only		Temperature limit
	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date		Unique device identifier