

PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

CD161

PURE	RUO	REF	IQP-646P	▽ 100 test
R-PE	RUO	REF	IQP-646R	▽ 100 test
APC	RUO	REF	IQP-646A	▽ 100 test

RUO **For Research Use Only**



Description

Clone HP-3G10

Isotype Murine IgG1

Specificity The mouse monoclonal antibody HP-3G10 recognizes CD161, a 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.

Species Human, Non-Human Primates

Immunogen human NK cells

Summary CD161, also known as 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 a majority of NK cells, NKT cells, and e.g. Th17 cells and CD3+ thymocytes. Although rat CD161 has three isoforms (a, b, c), the human CD161 is expressed as one isoform.

Applications FC, WB. Determining optimal working dilutions by titration test.

Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent performance can be affected by the use of anticoagulants.



Handling and Storage

Antibodies are supplied in phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4. Store the vials at 2-8°C. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization












To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

Warning All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

1. Pozo D, Valés-Gómez M, Mavaddat N, Williamson SC, Chisholm SE, Reyburn H: CD161 (human NKR-P1A) signaling in NK cells involves the activation of acid sphingomyelinase. J Immunol. 2006 Feb 15;176(4):2397-406.
2. Germain C, Meier A, Jensen T, Knapnougel P, Poupon G, Lazzari A, Neisig A, Håkansson K, Dong T, Wagtmann N, Galsgaard ED, Spee P, Braud VM: Induction of lectin-like transcript 1 (LLT1) protein cell surface expression by pathogens and interferon- γ ; contributes to modulate immune responses. J Biol Chem. 2011 Nov 4;286(44):37964-75
3. Wong EB, Akilimali NA, Govender P, Sullivan ZA, Cosgrove C, Pillay M, Lewinsohn DM, Bishai WR, Walker BD, Ndung'u T, Klenerman P, Kasprovicz VO: Low Levels of Peripheral CD161++CD8+ Mucosal Associated Invariant T (MAIT) Cells Are Found in HIV and HIV/TB Co-Infection. PLoS One. 2013 Dec 31;8(12):e83474
4. Birgit Fogal, Tai Yi, Chen Wang, Deepak A. Rao, Amir Lebastchi, Sanjay Kulkarni, George Tellides, Jordan S. Pober: Neutralizing IL-6 reduces human arterial allograft rejection by allowing emergence of CD161(+) CD4(+) T regulatory cells. J Immunol. 2011 December 15; 187(12): 6268–6280.
5. Tresoldi E, Dell'Albani I, Stabilini A, Jofra T, Valle A, Gagliani N, Bondanza A, Roncarolo MG, Battaglia M: Stability of human rapamycin-expanded CD4+CD25+ T regulatory cells. Haematologica. 2011 Sep;96(9):1357-65.
6. Goetzl EJ, Huang MC, Kon J, Patel K, Schwartz JB, Fast K, Ferrucci L, Madara K, Taub DD, Longo DL: Gender specificity of altered human immune cytokine profiles in aging. FASEB J. 2010 Sep;24(9):3580-9.

Explanation of used symbols

	Consult instructions for use
	Catalogue number
	Sufficient for
	Caution, consult accompanying document
	Keep away from (sun)light
	Biological risks
	Temperature limitation (°C)
	For Research Use Only
	Batch code
	Use by yyyy-mm-dd
	Manufacturer

		Label - tandem	Ex -max (nm)	Em -max (nm)
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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