

# Product datasheet

info@arigobio.com

# ARG65461 antibody [HP-3G10]

Package: 100 μg Store at: -20°C

#### **Summary**

Product Description Mouse Monoclonal antibody [HP-3G10] recognizes CD161

Tested Reactivity Hu, NHuPrm

Tested Application CyTOF®-candidate, FACS, WB

Specificity The clone 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.

Host Mouse

Clonality Monoclonal
Clone HP-3G10

Isotype IgG1

Target Name CD161

Species Human

Immunogenhuman NK cellsConjugationUn-conjugated

Alternate Names CLEC5B; CD antigen CD161; CD161; NKR-P1; NKR-P1A; Killer cell lectin-like receptor subfamily B

member 1; NKRP1A; NKR; HNKR-P1a; Natural killer cell surface protein P1A; C-type lectin domain family

5 member B; hNKR-P1A

## **Application Instructions**

Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	1 - 4 μg/ml
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Purified from hybridoma culture supernatant by protein-A affinity chromatography.

Purity > 95% (by SDS-PAGE)

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

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

#### Bioinformation

Database links GeneID: 3820 Human

Swiss-port # Q12918 Human

Gene Symbol KLRB1

Gene Full Name killer cell lectin-like receptor subfamily B, member 1

Background 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.

Function Plays an inhibitory role on natural killer (NK) cells cytotoxicity. Activation results in specific acid

sphingomyelinase/SMPD1 stimulation with subsequent marked elevation of intracellular ceramide. Activation also leads to AKT1/PKB and RPS6KA1/RSK1 kinases stimulation as well as markedly enhanced T-cell proliferation induced by anti-CD3. Acts as a lectin that binds to the terminal carbohydrate Galalpha(1,3)Gal epitope as well as to the N-acetyllactosamine epitope. Binds also to CLEC2D/LLT1 as a ligand and inhibits NK cell-mediated cytotoxicity as well as interferon-gamma secretion in target cells.

[UniProt]

Highlight Related products:

CD161 antibodies; Anti-Mouse IgG secondary antibodies;

Related news:

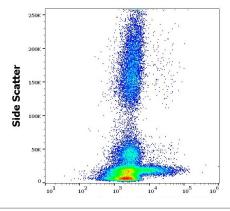
**CyTOF-candidate Antibodies** 

Research Area Developmental Biology antibody; Immune System antibody

Calculated Mw 25 kDa

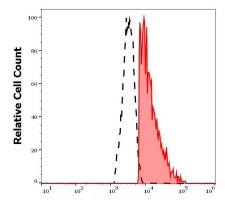
PTM N-glycosylated. Contains sialic acid residues.

#### **Images**



#### ARG65461 anti-CD161 antibody [HP-3G10] FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG65461 anti-CD161 antibody [HP-3G10] at 4  $\mu$ g/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



### ARG65461 anti-CD161 antibody [HP-3G10] FACS image

Flow Cytometry: Separation of human CD161 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG65461 anti-CD161 antibody [HP-3G10] at 4  $\mu g/ml$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.