

## ARG65361 anti-CD64 antibody [10.1]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [10.1] recognizes CD64
Tested Reactivity	Hu, NHuPrm
Tested Application	CyTOF®-candidate, FACS, FuncSt, ICC/IF, IHC-Fr, IHC-P, IP, WB
Specificity	The clone 10.1 recognizes alpha subunit of CD64/FcγRI, a 72 kDa single chain type I glycoprotein, that is expressed on monocytes/macrophages, dendritic cells, and activated granulocytes. HLDA III; WS Code M-250
Host	Mouse
Clonality	Monoclonal
Clone	10.1
Isotype	IgG1
Target Name	CD64
Species	Human
Immunogen	Rheumatoid synovial fluid cells and fibronectin purified human monocytes
Conjugation	Un-conjugated
Alternate Names	High affinity immunoglobulin gamma Fc receptor I; CD64; Fc-gamma RIA; CD antigen CD64; FcγRIa; FCRI; IgG Fc receptor I; CD64A; Fc-gamma RI; FcRI; IGFR1

### Application Instructions

Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	1 - 5 µg/ml
	FuncSt	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent

**Application Note**

IHC-P and IHC-Fr: There can occur problems with paraformaldehyde fixation  
 Functional studies: blocking of IgG binding to the FcγRI.  
 \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

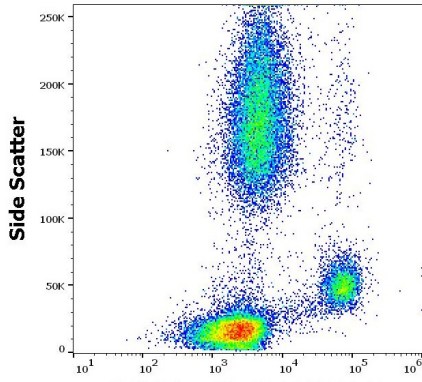
### Properties

Form	Liquid
Purification	Purified from cell 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

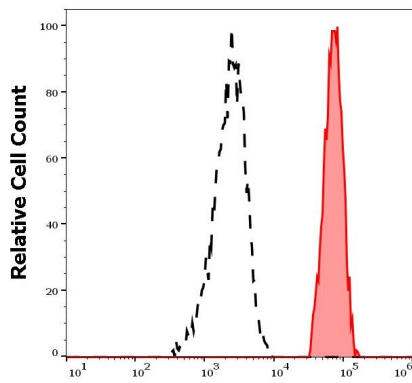
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Database links	<a href="#">GeneID: 2209 Human</a> <a href="#">Swiss-port # P12314 Human</a>
Gene Symbol	FCGR1A
Gene Full Name	Fc fragment of IgG, high affinity Ia, receptor (CD64)
Background	CD64 (FcγRI) is a cell surface receptor for Fc region of IgG. It is composed of specific ligand binding alpha subunit and promiscuous gamma subunit, which is indispensable for tyrosine-based signaling. However, even the alpha subunit can transduce signals leading to cellular effector functions. The isoform FcγRIa1 binds human IgG with high affinity, has limited myeloid cell distribution, and a relatively large intracellular domain. Products of related genes include FcγRIb and FcγRIc isoforms, but these specify low affinity IgG receptors if functionally expressed at all. Besides a role in antigen clearance, FcγRI (a1) can potentially enhance MHC class I and II antigen presentation in vitro and in vivo.
Function	High affinity receptor for the Fc region of immunoglobulins gamma. Functions in both innate and adaptive immune responses. [UniProt]
Highlight	Related products: <a href="#">CD64 antibodies: Anti-Mouse IgG secondary antibodies:</a> Related news: <a href="#">CyTOF-candidate Antibodies</a>
Research Area	Immune System antibody
Calculated Mw	43 kDa
PTM	Phosphorylated on serine residues.



ARG65361 anti-CD64 antibody [10.1] FACS image

Flow Cytometry: Human peripheral blood stained with ARG65361 anti-CD64 antibody [10.1] at 4  $\mu\text{g/ml}$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG65361 anti-CD64 antibody [10.1] FACS image

Flow Cytometry: Separation of human monocytes (red-filled) from CD64 negative lymphocytes (black-dashed). Human peripheral whole blood stained with ARG65361 anti-CD64 antibody [10.1] at 4  $\mu\text{g/ml}$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.