ARG65360
anti-CD64 antibody [10.1] (low endotoxin)

Package: 100 µg
Store at: -20°C

Summary

Product Description	Azide free and low endotoxin Mouse Monoclonal antibody [10.1] recognizes CD64
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS, FuncSt, ICC/IF, IHC-Fr, IHC-P, IP, WB
Specificity	The clone 10.1 recognizes alpha subunit of CD64/FcgammaRI, 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; FcgammaRIa; FCRI; IgG Fc receptor I; CD64A; Fc-gamma RI; FcRI; IGFR1

Application Instructions

Application table

Application	Dilution
FACS	1 - 4 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 FcgammaR1.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

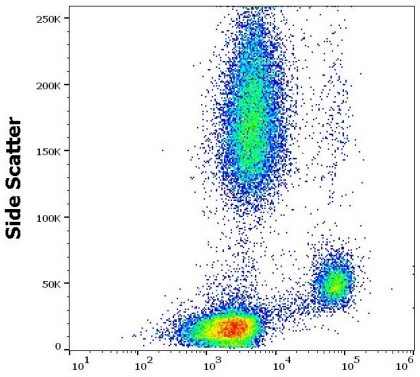
Form	Liquid

Purification	Purification with Protein A.
Purification Note	0.2 µm filter sterilized. Endotoxin level is 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
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

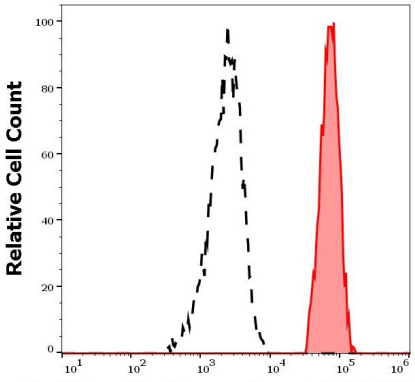
Database links	GeneID: 2209 Human Swiss-port # P12314 Human
Gene Symbol	FCGR1A
Gene Full Name	Fc fragment of IgG, high affinity Ia, receptor (CD64)
Background	CD64 (FcgammaRI) is a cell surface receptor for Fc region of IgG. It is composed of specific ligand binding alpha subunit and promiscuous gamma subunit, which is indispensable for tyrosine-based signaling. However, even the alpha subunit can transduce signals leading to cellular effector functions. The isoform FcgammaRIa1 binds human IgG with high affinity, has limited myeloid cell distribution, and a relatively large intracellular domain. Products of related genes include FcgammaRIb and FcgammaRIc isoforms, but these specify low affinity IgG receptors if functionally expressed at all. Besides a role in antigen clearance, FcgammaRI (a1) can potently 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]
Research Area	Immune System antibody
Calculated Mw	43 kDa
PTM	Phosphorylated on serine residues.

Images



ARG65360 anti-CD64 antibody [10.1] (low endotoxin) FACS image

Flow Cytometry: Human peripheral blood stained with ARG65360 anti-CD64 antibody [10.1] (low endotoxin) at 4 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG65360 anti-CD64 antibody [10.1] (low endotoxin) FACS image

Flow Cytometry: Separation of human monocytes (red-filled) from CD64 negative lymphocytes (black-dashed). Human peripheral whole blood stained with ARG65360 anti-CD64 antibody [10.1] (low endotoxin) at 4 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.