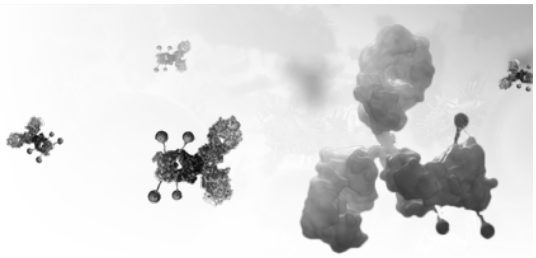

Mouse Anti-Human CD64 (FCGR1) Monoclonal Antibody, clone 10.1 [Functional Grade] (DCABH-6301)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Low endotoxin level (≤ 1.0 EU/mg) monoclonal antibody recognizes the alpha subunit of human FCGR1. More Lower endotoxin level (≤ 0.5 EU/mg) antibody is also available.
Immunogen	Rheumatoid synovial fluid cells and fibronectin purified human monocytes.
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	10.1
Purification	Protein A or G purified
Conjugate	Functional Grade
Applications	BL, FA, FC, IHC Recommended concentration: FC: ≤ 1 µg per 10^6 cells in a volume of 100 µl or 100µl of whole blood.
Format	Liquid
Concentration	Lot specific
Size	1 mg
Buffer	0.01 M phosphate buffered saline (PBS) pH 7.2 - 7.4, 150 mM NaCl with no carrier protein,

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	potassium, calcium or preservatives added. Endotoxin Level ≤ 1.0 EU/mg as determined by the LAL method
Preservative	None
Storage	Functional grade biosimilar antibodies may be stored sterile as received at 2-8℃ for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80℃. Avoid Repeated Freeze Thaw Cycles.
Ship	Wet ice

BACKGROUND

Introduction	FCGR1 is expressed on monocytes, macrophages, dendritic cells (DCs), and activated granulocytes. FCGR1 is a 72 kDa type I transmembrane glycoprotein expressed on monocytes, macrophages, and dendritic cells (DCs). FCGR1 can also be induced on neutrophils with IFNγ and G-CSF1. FCGR1 binds with high affinity to monomeric IgG1 and IgG3, and to a lesser extent, IgG4, resulting in phosphorylation of the intracellular FCGR1 ITAM motif and subsequent recruitment of Syk. FCGR1 contributes to inflammation via several mechanisms, including promoting antibody-dependent cell-mediated cytotoxicity (ADCC), clearance of immune complexes, cytokine production, and antigen presentation1. CD64-based targeted therapies eliminate M1 pro-inflammatory macrophages and show clinical potential for the treatment of macrophage-mediated chronic inflammatory diseases, such as chronic cutaneous inflammation and rheumatoid arthritis. In addition, CD64 promotes antitumor responses and mediates cytotoxic killing of tumor cells by macrophages.
Keywords	FCGR1A;Fc fragment of IgG, high affinity Ia, receptor (CD64);Fc fragment of IgG, high affinity Ia, receptor for (CD64);high affinity immunoglobulin gamma Fc receptor I;CD64;CD64A

GENE INFORMATION

Gene Name	FCGR1A
Entrez Gene ID	2209
UniProt ID	P12314

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