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Anti-CD16.2-AcalephFluor647-labled

Catalog # AP101784

Product Information

Application	FC, IF/IC
Primary Accession	A0A0B4J1G0
Reactivity	Mouse
Clonality	Monoclonal
Calculated MW	28398

Additional Information

Gene ID	246256
Other Names	Low affinity immunoglobulin gamma Fc region receptor IV; CD16-2; FcgammaRIV
Target/Specificity	Recognizes mouse CD16.2
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Armenian Hamster IgG. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	Fcgr4 {ECO:0000303|PubMed:17558411, ECO:0000312|MGI:MGI:2179523}
Function	Receptor for the invariable Fc fragment of immunoglobulin gamma (IgG) (PubMed:16039578). Binds with intermediate affinity to both IgG2a and IgG2b (PubMed:16039578, PubMed:17558411, PubMed:19795417). Can bind to IgG2a and IgG2b monomers (PubMed:18949059). Does not display binding to IgG1 or IgG3 (PubMed:16039578). Recognizes neutralizing virus-specific IgGs displayed on the cell surface of infected cells and triggers antibody-dependent cellular cytotoxicity (ADCC). Confers protection to lethal influenza virus infection (PubMed:24412922). On splenic dendritic cells, uptakes antigen immune complexes and efficiently divert them into MHC class I and II antigen presentation pathways to provide for superior priming of CD4-positive and CD8-positive T cell immune responses (PubMed:28389502). Mediates neutrophil activation by IgG complexes redundantly with FCGR2A (PubMed:18097064). Plays a role in promoting bone resorption by enhancing osteoclast differentiation following binding to IgG2a (PubMed:25824719). Also acts as a receptor for the Fc region of immunoglobulin epsilon (IgE) (PubMed:17558411, PubMed:18949059). Binds with low affinity to both the a and b allotypes of IgE (PubMed:18949059). Has also been shown to bind to

	IgE allotype a only but not to allotype b (PubMed:17558411). Binds aggregated IgE but not the monomeric form and bound monomeric IgG is readily displaced by IgE complexes (PubMed:18949059). Binding to IgE promotes macrophage- mediated phagocytosis, antigen presentation to T cells, production of pro-inflammatory cytokines and the late phase of cutaneous allergic reactions (PubMed:17558411, PubMed:18949059). Mediates enhanced ADCC in response to afucosylated IgGs (PubMed:34485821).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Detected on myeloid cells, peripheral blood monocytes, splenic and bone marrow dendritic cells, and thioglycollate- elicited macrophages and neutrophils but absent from lymphoid populations with no expression observed on T cells, B cells, NK cells or other granulocytes (at protein level) (PubMed:16039578, PubMed:19795417). Expressed in peripheral blood leukocytes, spleen, liver, thymus and small intestine (PubMed:12389094, PubMed:17558411) Expressed in splenic dendritic cell subsets (at protein level)

Background

AcalephFluor647-labled armenian hamster monoclonal antibody to CD16.2

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.