

FCGR3A monoclonal antibody, clone LNK16 (FITC)

Catalog # MAB4360

Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against native FCGR3A.
Immunogen	Native purified FCGR3A from normal human peripheral blood granulocytes.
Host	Mouse
Reactivity	Human, Non-Human Primates
Specificity	This antibody reacts with CD16, a low affinity receptor for aggregated IgG (FcgammaRIII antigen). CD16 exists in two different isoforms: CD16a (FcgammaRIIIA; 50-65 KDa; expressed on NK-cells, monocytes and macrophages) and CD16b (FcgammaRIIIB; 48 KDa; mainly expressed on neutrophils).
Form	Liquid
Conjugation	FITC
Isotype	IgG1
Recommend Usage	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10^6 cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunoprecipitation
- Flow Cytometry

Gene Info — FCGR3A

Entrez GeneID

[2214](#)

Gene Name

FCGR3A

Gene Alias

CD16, CD16A, FCG3, FCGR3, FCGR3L, FCR-10, FCR3L, FCR3A, IGFR3

Gene Description

Fc fragment of IgG, low affinity IIIa, receptor (CD16a)

Omim ID

[146740 152700](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

This gene encodes a receptor for the Fc portion of immunoglobulin G, and it is involved in the removal of antigen-antibody complexes from the circulation, as well as other antibody-dependent responses. This gene (FCGR3A) is highly similar to another nearby gene (FCGR3B) located on chromosome 1. The receptor encoded by this gene is expressed on natural killer (NK) cells as an integral membrane glycoprotein anchored through a transmembrane peptide, whereas FCGR3B is expressed on polymorphonuclear neutrophils (PMN) where the receptor is anchored through a phosphatidylinositol (PI) linkage. Mutations in this gene have been linked to susceptibility to recurrent viral infections, susceptibility to systemic lupus erythematosus, and alloimmune neonatal neutropenia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

Fc fragment of IgG, low affinity III, receptor for (CD16)|Fc fragment of IgG, low affinity IIIa, receptor for (CD16)|Fc gamma receptor III-A|Fc-gamma RIII-alpha|Fc-gamma RIIIa|Fc-gamma receptor III-2 (CD 16)|Fc-gamma receptor IIIb (CD16)|FcgammaRIIIA|OTTH

Publication Reference

- [Human macrophages kill human mesangial cells by Fas-L-induced apoptosis when triggered by antibody via CD16.](#)

Boyle JJ.

Clinical and Experimental Immunology 2004 Sep; 137(3):529.

Application: Flow Cyt, Human, U-940

- [IgE-mediated activation of NK cells through Fc gamma RIII.](#)

Arase N, Arase H, Hirano S, Yokosuka T, Sakurai D, Saito T.

Journal of Immunology 2003 Mar; 170(6):3054.

- [The binding epitopes of human CD16 \(Fc gamma RIII\) monoclonal antibodies. Implications for ligand binding.](#)

Tamm A, Schmidt RE.

Journal of Immunology 1996 Aug; 157(4):1576.

Application: Flow Cyt, Human, HEK 297 cells

Pathway

- [Fc gamma R-mediated phagocytosis](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Systemic lupus erythematosus](#)

Disease

- [Acute Disease](#)
- [Addison Disease](#)
- [Aggressive Periodontitis](#)
- [Agranulocytosis](#)
- [Alveolar Bone Loss](#)
- [Anemia](#)
- [Anti-Glomerular Basement Membrane Disease](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Behcet Syndrome](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Candidiasis](#)

- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Cell Transformation](#)
- [Cerebrovascular Accident](#)
- [Chronic Disease](#)
- [Chronic Periodontitis](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Crohn Disease](#)
- [Cryoglobulinemia](#)
- [Cryptococcosis](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Edema](#)
- [Epilepsy](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Guillain-Barre Syndrome](#)
- [Head and Neck Neoplasms](#)
- [Hepatitis C](#)
- [Herpesviridae Infections](#)
- [Immunologic Deficiency Syndromes](#)
- [Infection](#)

- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Leukemia](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphoma](#)
- [Malaria](#)
- [Meningococcal Infections](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Myasthenia Gravis](#)
- [Myositis](#)
- [Nephritis](#)
- [Neuroblastoma](#)
- [Neutropenia](#)
- [Papillomavirus Infections](#)
- [Pemphigoid](#)
- [Periodontal Attachment Loss](#)
- [Periodontal Diseases](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Pneumonia](#)
- [Poliomyelitis](#)
- [Postpoliomyelitis Syndrome](#)
- [Purpura](#)

- [Recurrence](#)
- [Respiratory Tract Infections](#)
- [Rhinitis](#)
- [Sarcoma](#)
- [Scleroderma](#)
- [Seizures](#)
- [Sepsis](#)
- [Stomach Neoplasms](#)
- [Temporal Arteritis](#)
- [Thrombocytopenia](#)
- [Thymoma](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Urinary Tract Infections](#)
- [Uterine Cervical Neoplasms](#)
- [Vasculitis](#)
- [Waldenstrom Macroglobulinemia](#)
- [Wegener Granulomatosis](#)