

## Datasheet

### FCGR3A monoclonal antibody, clone LNK16 (FITC)

**Catalog Number:** MAB4360

**Regulatory Status:** For research use only (RUO)

**Product Description:** Mouse monoclonal antibody raised against native FCGR3A.

**Clone Name:** LNK16

**Immunogen:** Native purified FCGR3A from normal human peripheral blood granulocytes.

**Host:** Mouse

**Reactivity:** Human, Non-Human Primates

**Applications:** Flow Cyt, IP

(See our web site product page for detailed applications information)

**Protocols:** See our web site at

<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Specificity:** This antibody reacts with CD16, a low affinity receptor for aggregated IgG (FcγRIII antigen). CD16 exists in two different isoforms: CD16a (FcγRIIIA; 50-65 kDa; expressed on NK-cells, monocytes and macrophages) and CD16b (FcγRIIIB; 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<sup>6</sup> 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.

**Entrez GeneID:** 2214

**Gene Symbol:** FCGR3A

**Gene Alias:** CD16, CD16A, FCG3, FCGR3, FCGR3I, FCR-10, FCRIII, FCRIIIA, IGFR3

**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]

#### References:

1. Human macrophages kill human mesangial cells by Fas-L-induced apoptosis when triggered by antibody via CD16. Boyle JJ. Clin Exp Immunol. 2004 Sep;137(3):529-37.
2. IgE-mediated activation of NK cells through Fc gamma RIII. Arase N, Arase H, Hirano S, Yokosuka T, Sakurai D, Saito T. J Immunol. 2003 Mar 15;170(6):3054-8.
3. The binding epitopes of human CD16 (Fc gamma RIII) monoclonal antibodies. Implications for ligand binding. Tamm A, Schmidt RE. J Immunol. 1996 Aug 15;157(4):1576-81.