Best Tools for immunology Research

CD16 Monoclonal Antibody(Q32)

Catalog No :	YM3090
Reactivity :	Human
Applications :	WB;IHC;IF;
Target :	CD16
Fields :	>>Phagosome;>>Osteoclast differentiation;>>Neutrophil extracellular trap formation;>>Natural killer cell mediated cytotoxicity;>>Fc gamma R-mediated phagocytosis;>>Leishmaniasis;>>Staphylococcus aureus infection;>>Tuberculosis;>>Systemic lupus erythematosus
Gene Name :	FCGR3A/FCGR3B
Protein Name :	Low affinity immunoglobulin gamma Fc region receptor III-A/Low affinity immunoglobulin gamma Fc region receptor III-B
Human Gene Id :	2214/2215
Human Swiss Prot No :	P08637/O75015
Immunogen :	Synthetic Peptide of CD16
Specificity :	The antibody detects endogenous CD16 protein.
Formulation :	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source :	Monoclonal, Mouse
Dilution :	WB 1:1000 IHC 1:50-300. IF 1:50-200
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 45kD

Cell Pathway : Natural killer cell mediated cytotoxicity;Fc gamma R-mediated phagocytosis;Systemic lupus erythematosus;

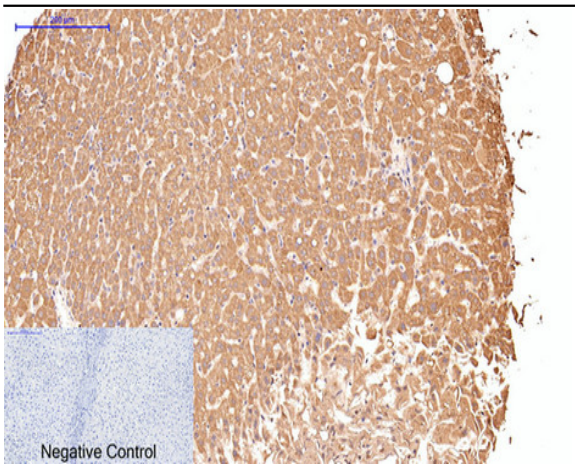
Background : This gene encodes a receptor for the Fc portion of immunoglobulin G, and it is involved in the removal of antigen-antibody complexes from the circulation, as well as other other antibody-dependent responses. This gene (FCGR3A) is highly similar to another nearby gene (FCGR3B) located on 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,

Function : function:Receptor for the Fc region of IgG. Binds complexed or aggregated IgG and also monomeric IgG. Mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis.,miscellaneous:Encoded by one of two nearly indentical genes: FCGR3A (Shown here) and FCGR3B which are expressed in a tissue-specific manner. The Phe-203 in III-A determines the transmembrane domains whereas the Ser-203 in III-B determines the GPI-anchoring.,online information:FCGR3A mutation db,polymorphism:Isoform Val-157 shows a higher binding capacity of IgG1, IgG3 and IgG4 compared with isoform Phe-157. Alleles Leu-66 and Phe-157, and alleles His-66 / Arg-66 and Val-157 are in linkage desequilibrium.,PTM:Glycosylated. Contains high mannose- and complex-type oligosaccharides.,PTM:The soluble form is produced by a proteolytic cleavage.,similarity:Contains 2 Ig-like C2-

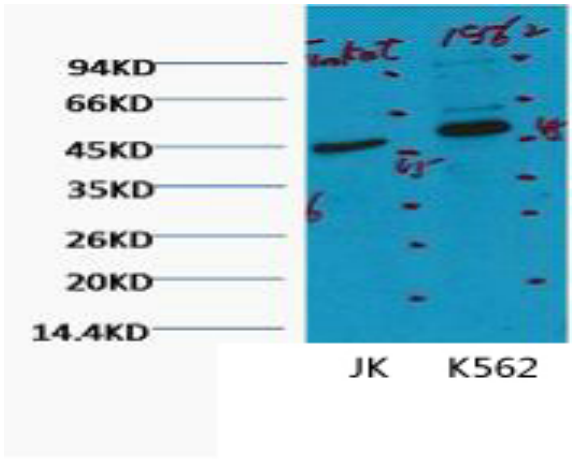
Subcellular Location : Cell membrane ; Single-pass type I membrane protein . Secreted . Exists also as a soluble receptor. .

Expression : Expressed in natural killer cells (at protein level) (PubMed:2526846). Expressed in a subset of circulating monocytes (at protein level) (PubMed:27670158).

Products Images



Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,CD16 Monoclonal Antibody(Q32) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Western blot analysis of 1) Jurkat, 2) K562, diluted at 1:2000.