

## Rabbit Anti-CD16 antibody

SL6028R

**Product Name** CD16

**Chinese Name** FC 段  $\gamma$  受体 3/免疫球蛋白 G Fc 段受体 III 抗体

**Alias** FCG3A\_HUMAN; Low affinity immunoglobulin gamma Fc region receptor III-A; CD16a antigen; Fc-gamma RIII-alpha; Fc-gamma RIII; Fc-gamma RIIIa; FcRIII; FcRIIIa; FcR-10; IgG Fc receptor III-2; CD\_antigen: D16a; FCGR3A; CD16A; FCG3; FCGR3; IGFR3.

**Research Area** Cell biology immunology Stem cells Cell Surface Molecule Cell type markers

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human Mouse Rat

**Applications** WB=1:500-1000 (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 27kDa

**Cellular localization** The cell membrane Secretory protein

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human IGFR3/CD16: 131-230/254 <Extracellular>

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** Human,Mouse,Rat1M TBS(pH7.4) with 1% BSA, Human,Mouse,Rat3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

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 responses, including antibody dependent cellular mediated cytotoxicity and antibody dependent enhancement of virus infections. 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 are associated with immunodeficiency 20, and 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, Aug 2020]

**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.

**Subunit:**

Exists as a heterooligomeric receptor complex with Fc epsilon receptor I gamma subunit and / or the CD3 zeta subunit. Interacts with INPP5D/SHIP1.

**Subcellular Location:**

Cell membrane. Secreted. Exists also as a soluble receptor.

**Tissue Specificity:**

Expressed on natural killer cells, macrophages, subpopulation of T-cells, immature thymocytes and placental trophoblasts.

**Post-translational modifications:**

Glycosylated. Contains high mannose- and complex-type oligosaccharides. The soluble form is produced by a proteolytic cleavage. [MISCELLANEOUS] Encoded by one of two nearly identical 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.

**Similarity:**

Contains 2 Ig-like C2-type (immunoglobulin-like) domains.

**SWISS:**

P08637

**Product  
Detail**

**Gene ID:**  
2214

**Database links:**

[Entrez Gene: 2214](#) Human

[Entrez Gene: 14131](#) Mouse

[Entrez Gene: 304966](#) Rat

[Omim: 146740](#) Human

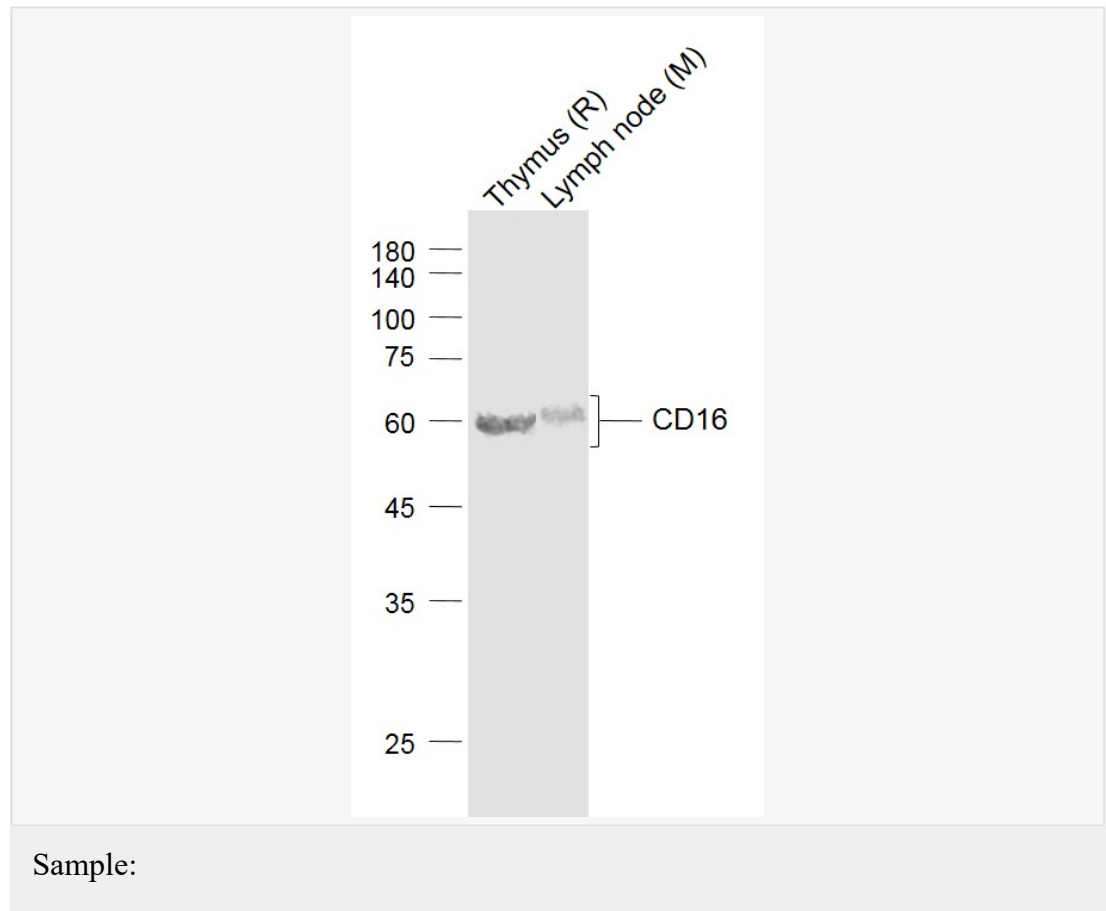
[SwissProt: P08637](#) Human

[SwissProt: P08508](#) Mouse

[SwissProt: P27645](#) Rat

[Unigene: 372679](#) Human

**Product  
Picture**



Lane 1: Thymus (Rat) Lysate at 40 ug

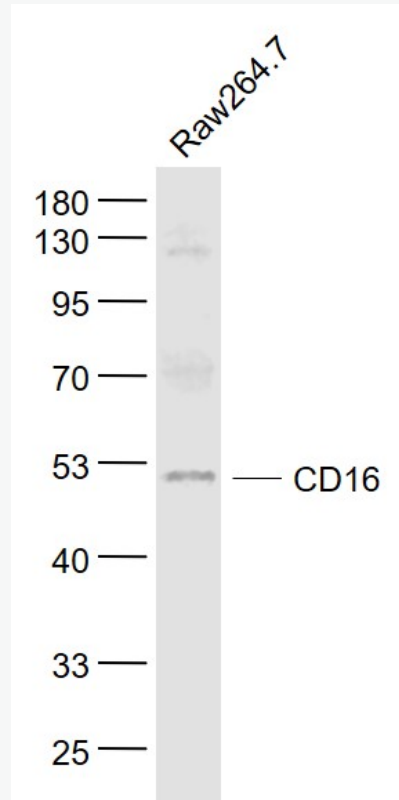
Lane 2: Lymph node (Mouse) Lysate at 40 ug

Primary: Anti-CD16 (SL6028R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 60 kD



Sample:

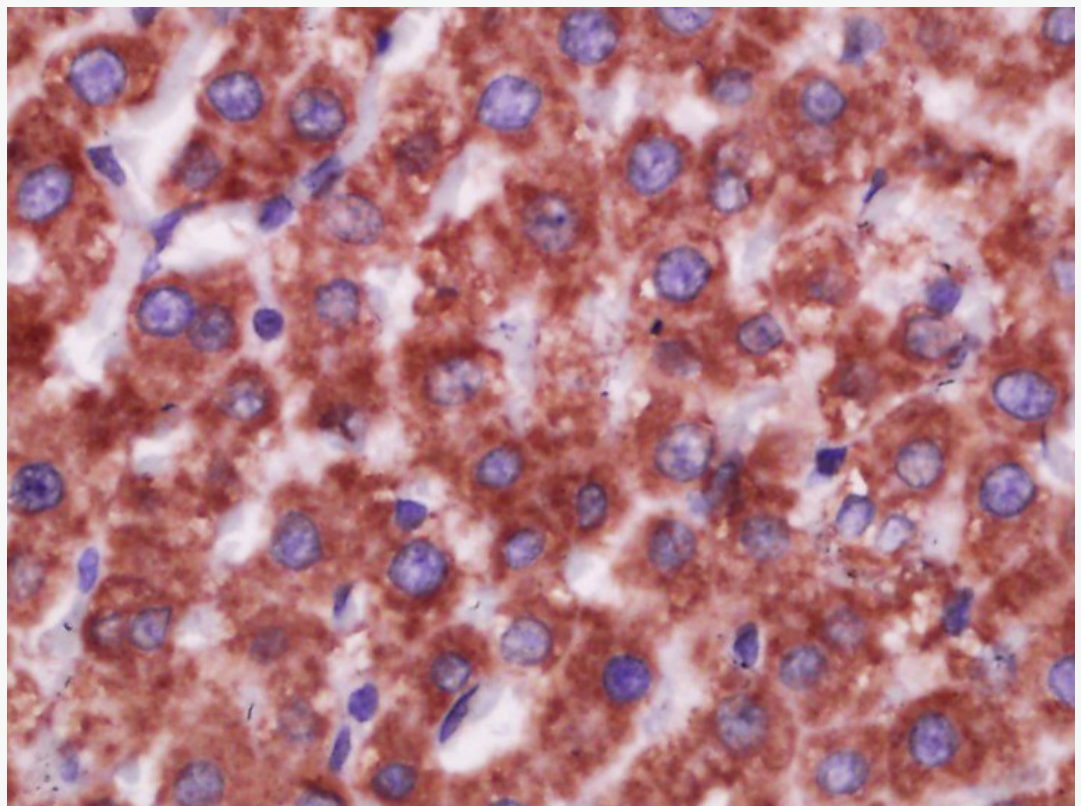
Raw264.7(Mouse) Cell Lysate at 30 ug

Primary: Anti- CD16 (SL6028R) at 1/1000 dilution

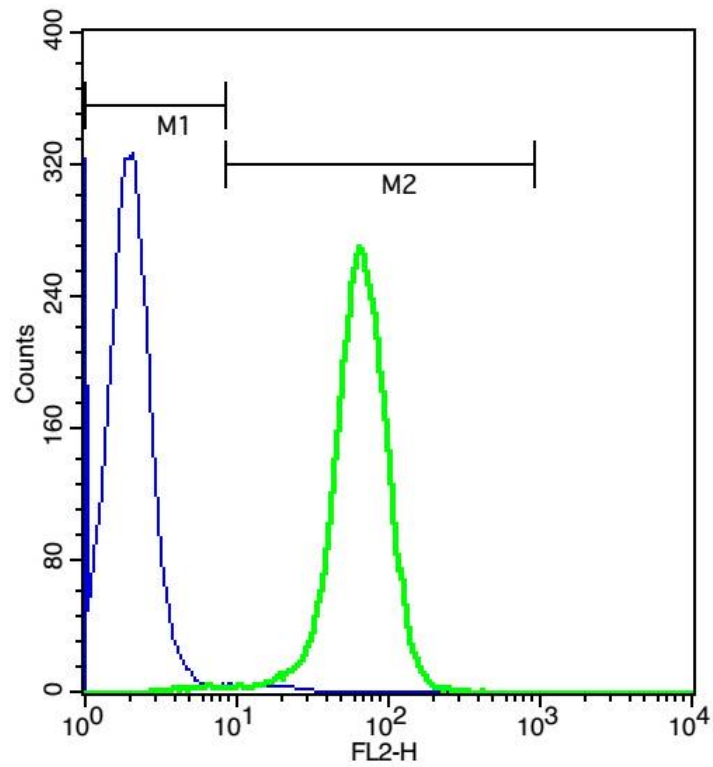
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 27 kD

Observed band size: 50 kD



Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD16) Polyclonal Antibody, Unconjugated (SL6028R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Cell: U937(4% Paraformaldehyde fixed for 10 minutes,2% BSA at 4°C blocked for 30 minutes.).

Concentration:1:100;Incubation: 40 minutes.

Flow cytometric analysis of Rabbit Anti-CD16 antibody (SL6028R)(green) compared with control in the absence of primary antibody (blue) followed by U937.

Secondary antibody: Goat Anti-rabbit IgG/PE antibody (SL0295G-PE)