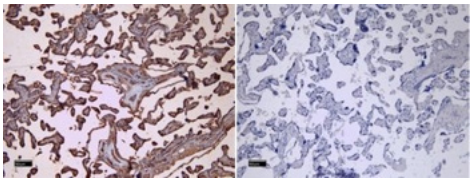
CD32 Antibody / Low-Affinity Fc Gamma Receptor (R34966)

Catalog No.	Formulation	Size
R34966-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

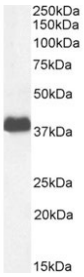
Citations (2)

Bulk quote request

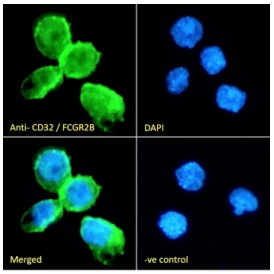
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	2213
RRID	AB_2833066
Localization	Cytoplasmic, membrane
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 8ug/ml Immunofluorescence: 10ug/ml Flow cytometry: 10ug/ml ELISA (peptide) LOD: 1:16000
Limitations	This CD32 Antibody / Low-Affinity Fc Gamma Receptor is available for research use only.



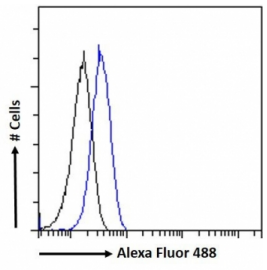
CD32 Antibody Placenta IHC. Immunohistochemistry analysis of FFPE human placental tissue stained with CD32 Antibody / Low-Affinity Fc Gamma Receptor at 8 ug/ml following HIER in pH 6 citrate buffer. Distinct HRP-DAB brown membranous and cytoplasmic staining is observed in placental trophoblast-associated cell populations, consistent with expression of FCGR2 / CD32, an Fc receptor involved in immune complex recognition and regulation of antibody-mediated immune signaling. The negative control section processed without primary antibody shows minimal background staining.



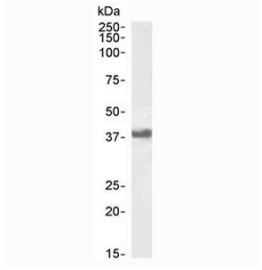
CD32 Antibody Placenta WB. Western blot analysis of human placental tissue lysate using CD32 Antibody / Low-Affinity Fc Gamma Receptor at 1 ug/ml. A prominent band is detected near 34-40 kDa, consistent with the expected glycosylation-dependent molecular weight range of FCGR2 / CD32, an Fc receptor involved in immune complex recognition and regulation of leukocyte signaling pathways.



CD32 Antibody ThP-1 IF. Immunofluorescence analysis of fixed and permeabilized human ThP-1 cells stained with CD32 Antibody / Low-Affinity Fc Gamma Receptor (green) at 10 ug/ml together with DAPI nuclear stain (blue). Distinct membranous and cytoplasmic fluorescence is observed in ThP-1 monocytic cells, consistent with expression of FCGR2 / CD32, an Fc receptor involved in immune complex recognition and leukocyte activation pathways. The negative control demonstrates minimal background fluorescence.



CD32 Antibody K562 FACS. Flow cytometry analysis of fixed and permeabilized human K562 cells stained with CD32 Antibody / Low-Affinity Fc Gamma Receptor (blue) at 10 ug/ml. A clear rightward fluorescence shift is observed relative to the naive goat Ig control (black), consistent with detection of FCGR2 / CD32, an Fc receptor involved in immune complex signaling and leukocyte activation pathways.



CD32 Antibody Daudi WB. Western blot analysis of human Daudi cell lysate using CD32 Antibody / Low-Affinity Fc Gamma Receptor at 1 ug/ml. A distinct band is detected near 34-40 kDa, consistent with the expected glycosylation-dependent molecular weight range of FCGR2 / CD32, an immune complex receptor involved in Fc-mediated leukocyte activation and inflammatory signaling pathways.

Description

Fc gamma receptor II (FCGR2), commonly known as CD32, is a family of low-affinity IgG Fc receptors involved in immune complex recognition, leukocyte activation, and regulation of antibody-mediated immune responses. CD32 Antibody / Low-Affinity Fc Gamma Receptor is useful for studying innate immune signaling, Fc receptor biology, B-cell regulation, phagocytosis, and inflammatory pathway activation. CD32 receptors are encoded by closely related FCGR2 family genes including FCGR2A, FCGR2B, and FCGR2C, which together regulate activating and inhibitory Fc-mediated immune signaling pathways.

CD32 antibody, also referred to as FCGR2 antibody, Fc gamma receptor II antibody, or FCGR2A/FCGR2B antibody in the literature, recognizes a transmembrane Fc receptor family expressed primarily on monocytes, macrophages, neutrophils, dendritic cells, B lymphocytes, platelets, and additional immune-associated cell populations. CD32 receptors bind IgG-containing immune complexes with lower affinity than CD64/FCGR1A and contribute to immune complex clearance, cytokine production, antigen presentation, and regulation of inflammatory signaling.

Different CD32 isoforms mediate distinct biologic functions. FCGR2A primarily functions as an activating receptor involved in phagocytosis and leukocyte activation, while FCGR2B serves as a major inhibitory Fc receptor that suppresses excessive immune activation and maintains immune tolerance. Through balanced activating and inhibitory

signaling, CD32 receptors regulate antibody-dependent immune responses and contribute to control of inflammation, infection, and autoimmunity.

CD32 expression has been widely studied in sepsis, autoimmune disease, hematologic malignancy, chronic inflammation, and tumor immunology. Altered FCGR2 signaling may influence susceptibility to infection, antibody therapy responses, immune complex-mediated tissue injury, and regulation of B-cell activation pathways. CD32 additionally contributes to Fc-mediated signaling mechanisms involved in macrophage activation and innate immune regulation.

FCGR2 family proteins are encoded within the Fc receptor gene cluster on chromosome 1q23 and produce glycosylated type I transmembrane receptors containing extracellular immunoglobulin-like domains responsible for IgG binding. CD32 proteins localize predominantly to the plasma membrane where they regulate Fc receptor signaling and leukocyte communication pathways. Because Fc receptor biology is central to both innate and adaptive immunity, CD32 remains an important target in immunology, inflammation, and therapeutic antibody research.

This goat polyclonal CD32 antibody is suitable for research applications involving flow cytometry, western blotting, immunophenotyping, and immune receptor signaling analysis. The antibody supports detection of endogenous CD32/FCGR2-associated receptor expression in immune-related cell populations relevant to Fc-mediated inflammatory and leukocyte activation pathways.

Explore the broader CD Antibodies page for additional antibodies targeting leukocyte differentiation markers, immune receptors, and cell surface proteins involved in innate and adaptive immune signaling pathways.

Application Notes

Optimal dilution of the CD32 Antibody / Low-Affinity Fc Gamma Receptor should be determined by the researcher.

Immunogen

Amino acids PDALEEPDDQNRI were used as the immunogen for this CD32 antibody.

Storage

Aliquot and store the CD32 antibody at -20oC.

Alternate Names

FCGR2 antibody, Fc gamma receptor II antibody, FCGR2A antibody, FCGR2B antibody, CD32 immune receptor antibody

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