

Datasheet for ABIN2859328
FCGR2B ELISA Kit[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	FCGR2B
Binding Specificity:	AA 40-217
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CD32/FCGR2b/c
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: T40-R217
Specificity:	Expression system for standard: NSO Immunogen sequence: T40-R217
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	FCGR2B
Alternative Name:	FCGR2B (FCGR2B Products)
Background:	<p>Protein Function: Receptor for the Fc region of complexed immunoglobulins gamma. Low affinity receptor. Involved in a variety of effector and regulatory functions such as phagocytosis of antigen-antibody complexes from the circulation and modulation of antibody production by B-cells. Isoform IIB1 and isoform IIB1' form caps but fail to mediate endocytosis or phagocytosis. Isoform IIB2 can mediate the endocytosis of soluble immune complexes via clathrin- coated pits. Isoform IIB1 and isoform IIB2 can down-regulate B- cell, T-cell, and mast cell activation when coaggregated to B-cell receptors for AG (BCR), T-cell receptors for AG (TCR), and Fc receptors, respectively.</p> <p>Background: CD32 is a surface receptor protein and part of a large population of B cell co-receptors, which act to modulate signaling. It has a low-affinity for IgG antibodies and down-regulates antibody production in the presence of IgG. This feedback loops essentially lowers the production of IgG produced by B cells when there is a surplus in the body.</p> <p>Synonyms: Low affinity immunoglobulin gamma Fc region receptor II,Fc gamma receptor IIB,Fc-gamma RII,Fc-gamma-RIIB,FcRII,IgG Fc receptor II beta,Lymphocyte antigen 17,Ly-17,CD32,Fcgr2,Fcgr2b, Ly-17,</p> <p>Full Gene Name: Low affinity immunoglobulin gamma Fc region receptor II</p> <p>Cellular Localisation: Cell membrane, Single-pass type I membrane protein.</p>
Gene ID:	14130
UniProt:	P08101
Pathways:	Cellular Response to Molecule of Bacterial Origin , Regulation of Leukocyte Mediated Immunity , Production of Molecular Mediator of Immune Response , BCR Signaling

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
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Application Details

assay was recommended for both standard and sample testing.

Comment: Sequence similarities: Contains 2 Ig-like C2-type (immunoglobulin-like) domains.
Tissue Specificity: Widely expressed by cells of hemopoietic origin. The isoforms are differentially expressed. Isoform IIB1 is preferentially expressed by cells of the lymphoid lineage, isoform IIB2 by cells of the myeloid lineage, and isoform IIB3 is released by macrophages and is present in the serum. Isoform IIB1' is expressed in myeloid and lymphoid cell lines, in normal spleen cells, and in resting or LPS-activated B-cells but is not detected in mesenteric lymph node cells.

Plate: Pre-coated

Protocol: mouse CD32 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CD32 has been precoated onto 96-well plates. Standards(NSO, T40-R217) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD32 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse CD32 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL mouse CD32 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse CD32 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 195, Standard deviation: 8.19, CV(%): 4.2
- Sample 2: n=16, Mean(pg/ml): 472, Standard deviation: 22.66, CV(%): 4.8
- Sample 3: n=16, Mean(pg/ml): 1023, Standard deviation: 521.7, CV(%): 5.1,
- Sample 1: n=24, Mean(pg/ml): 216, Standard deviation: 11.88, CV(%): 5.5
- Sample 2: n=24, Mean(pg/ml): 515, Standard deviation: 31.93, CV(%): 6.2
- Sample 3: n=24, Mean(pg/ml): 1174, Standard deviation: 81, CV(%): 6.9

Restrictions: For Research Use only

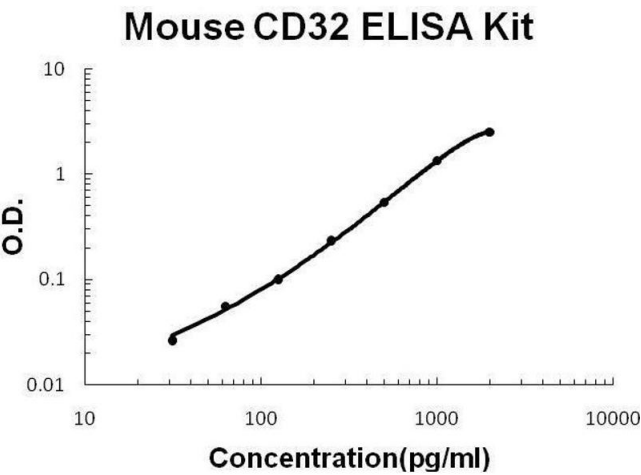
Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

Handling

Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Images



ELISA

Image 1. Mouse CD32/FCGR2b/c PicoKine ELISA Kit standard curve