

Mouse CD32 / FCGR2B Protein (His Tag)

Catalog Number: 50030-M08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

Fcgr2

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Arg 217) of mouse FCGR2B (NP_001070657.1) precursor was expressed with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized mouse FCGR2B-His (CD32) (Cat:50030-M08H) at 10 µg/ml (100 µl/well) can bind biotinylated human IgG1. The EC₅₀ of biotinylated human IgG1 is 0.13-0.29 µg/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Thr 40

Molecular Mass:

The secreted recombinant mouse FCGR2B consists of 189 amino acids and has a predicted molecular mass of 21.7 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rm FCGR2B is approximately 35-40 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

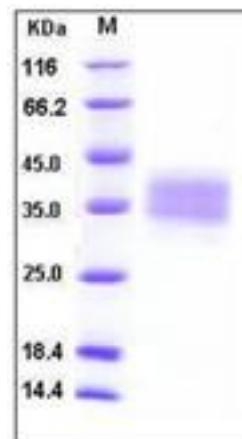
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Receptors for Fc portion of IgG (Fcγ Rs) are members of the Ig superfamily, and are divided into three classes designated Fcγ RI (CD64), Fcγ RII (CD32), and Fcγ RIII (CD16). CD32 protein is a low affinity receptor for IgG that binds only IgG immune complexes and is expressed on a diverse range of cells such as monocytes, macrophages, neutrophils, eosinophils, platelets, and B cells. Human CD32 class is encoded by three closely related genes, and designated Fcγ RII A, B, and C which share 94-99% amino acid identity in their extracellular domains but differ substantially in their transmembrane and cytoplasmic domains. CD32 is involved in a number of immune responses including antibody-dependent cell-mediated cytotoxicity, clearance of immune complexes, release of inflammatory mediators, and regulation of antibody production.

References

1. Williams TE, *et al.* (2000) Concurrent and independent binding of Fcγ receptors IIa and IIb to surface-bound IgG. *Biophys J.* 79(4): 1867-75.
2. Kanter D, *et al.* (2007) Expression of activated Fc gamma RII discriminates between multiple granulocyte-priming phenotypes in peripheral blood of allergic asthmatic subjects. *J Allergy Clin Immunol.* 120(5): 1073-81.
3. Veri MC, *et al.* (2007) Monoclonal antibodies capable of discriminating the human inhibitory Fcγ receptor IIB (CD32B) from the activating Fcγ receptor IIA (CD32A): biochemical, biological and functional characterization. *Immunology.* 121(3): 392-404.

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