Datasheet for ABIN2180821

FCGR1A Protein (AA 25-297) (His tag)

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Overview

Quantity:	100 µg
Target:	FCGR1A
Protein Characteristics:	AA 25-297
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This FCGR1A protein is labelled with His tag.

Product Details

Brand:	MABSol®
Sequence:	AA 25-297
Characteristics:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 31.2 kDa. The protein migrates as 40-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	FCGR1A
Alternative Name:	Fc gamma RI / CD64 (FCGR1A Products)
Background:	Receptors that recognize the Fc portion of IgG are divided into three groups designated Fc gamma RI, RII, and RIII, also known respectively as CD64, CD32, and CD16. Fc gamma RI binds IgG with high affinity and functions during early immune responses. Fc gamma RII and RIII are low affinity receptors that recognize IgG as aggregates surrounding multivalent antigens during late immune responses. High affinity immunoglobulin gamma Fc receptor I is also known as FCGR1A, FCG1, FCGR1, CD64 and IGFR1, is a type of integral membrane glycoprotein that binds monomeric IgG-type antibodies with high affinity, which belongs to the immunoglobulin superfamily or FCGR1 family. FCGR1A / CD64 contains 3 Ig-like C2-type (immunoglobulin-like) domains. CD64 is constitutively found on only macrophages and monocytes, but treatment of polymorphonuclear leukocytes with cytokines like IFNγ and G-CSF can induce CD64 expression on these cells.
Molecular Weight:	32.3 kDa
Pathways:	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After reconstitution under sterile conditions for 3 months (-70 °C).

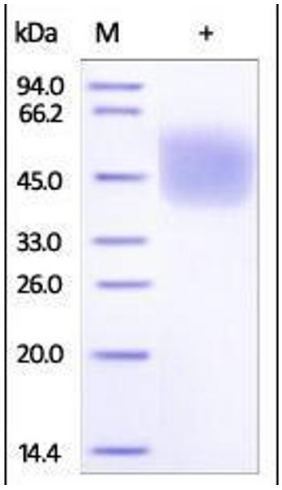
Publications

Product cited in:	Brekke, Sagen, Bjerve: "Specificity of endogenous fatty acid release during tumor necrosis factor-induced apoptosis in WEHI 164 fibrosarcoma cells." in: **Journal of lipid research**, Vol. 40, Issue 12, pp. 2223-33, (2000) (PubMed).

Publications

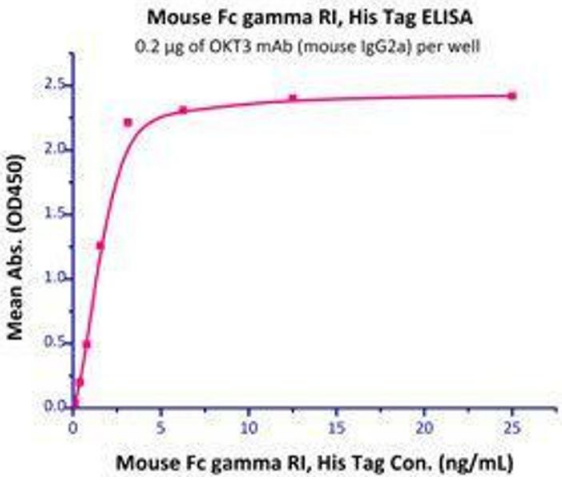
Tacchini-Cottier, Vesin, Redard, Buurman, Piguet: "Role of TNFR1 and TNFR2 in TNF-induced platelet consumption in mice." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 160, Issue 12, pp. 6182-6, (1998) (PubMed).

Images



SDS-PAGE

Image 1. Mouse Fc gamma RI, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



Binding Studies

Image 2. Immobilized OKT3 mAb (mouse IgG2a) at 2 µ g/mL (100 µl/well) can bind Mouse Fc gamma RI, His Tag (Cat# CD4-M5227) with a linear range of 0.4-3 ng/mL.