

Recombinant Mouse Fc Receptor, IgG, High Affinity I, AVI-tagged

Cat. No. Fcgr1-4003M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the extracellular domain (Met 1 - Pro 297) of mouse FCGR1 (NP_034316.1) was fused with a c-terminal polyhistidine tagged AVI tag at the C-terminus.
Species	Human
Source	Mouse
ProteinLength	1-297 a.a.
Description	High affinity immunoglobulin gamma Fc receptor I, also known as FCGR1 and CD64, is an integral membrane glycoprotein and a member of the immunoglobulin superfamily. CD64 is a high affinity receptor for the Fc region of IgG gamma and functions in both innate and adaptive immune responses. Receptors that recognize the Fc portion of IgG function in the regulation of immune response and are divided into three classes designated CD64, CD32, and CD16. CD64 is structurally composed of a signal peptide that allows its transport to the surface of a cell, three extracellular immunoglobulin domains of the C2-type that it uses to bind antibody, a hydrophobic transmembrane domain, and a short cytoplasmic tail. CD64 is constitutively found on only macrophages and monocytes, but treatment of polymorphonuclear leukocytes with cytokines like IFN μ and G-CSF can induce CD64 expression on these cells. The inactivation of the mouse CD64 resulted in a wide range of defects in antibody Fc-dependent functions. Mouse CD64 is an early

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	participant in Fc-dependent cell activation and in the development of immune responses.
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.
Purity	> 97 % as determined by SDS-PAGE
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 -70µ
Predicted N terminal	Glu 25
Molecular Mass	The recombinant mouse FCGR1 consists of 308 amino acids after removal of the signal peptide and has a predicted molecular mass of 34.3 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rm FCGR1 is approximately 45-50 kDa due to glycosylation
Storage	Store it under sterile conditions at -70µ. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	Fcgr1 Fc receptor, IgG, high affinity I [<i>Mus musculus</i>]
Official Symbol	Fcgr1
Synonyms	Fcgr1; Fc receptor, IgG, high affinity I; IgG high affinity Fc receptor; fc-gamma RI; fcRI; high affinity immunoglobulin gamma Fc receptor I; igG Fc receptor I; CD64;

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	IGGHAFC; AI323638; AV092959; FcgammaRI
Gene ID	14129
mRNA Refseq	NM_010186
Protein Refseq	NP_034316
UniProt ID	P26151
Chromosome Location	3 F2.1; 3 45.2 cM
Pathway	Fc gamma R-mediated phagocytosis; Hematopoietic cell lineage; Leishmania infection; Systemic lupus erythematosus
Function	IgG binding; IgG binding; IgG receptor activity; receptor activity

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