Recombinant Protein Technical Manual

Recombinant Mouse CD64/FCGR1 Protein (His&AVI Tag), Biotinylated(Active)

RPES4941

Product Data:

Product SKU: RPES4941

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_034316.1

Protein Information:

Molecular Mass:	34.3 kDa
AP Molecular Mass:	50-55 kDa
Tag:	C-His-AVI
Bio-activity:	1. Measured by its ability to bind mouse APCS in a functional ELISA.2. Labeling ratio of biotin to protein: 1.1
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	AI323638;AV092959;CD64;FcgammaRI;IGGHAFC

Immunogen Information:

Sequence: Met 1-Pro 297

Background:

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 IFNγ 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 participant in Fc-dependent cell activation and in the development of immune responses.