

Recombinant Human CD32a / FCGR2A Protein (167 Arg, His & AVI tag)

Cat.NO.: TP07218

3th Edition

Synonyms:CD32;CD32A;CDw32;Fc gamma RIIA;FCG2;FcGR;FCGR2;FCGR2A1;IGFR2

Description:Receptors for the Fc region of IgG (Fc γ R) are members of the Ig superfamily that function in the activation or inhibition of immune responses. Human Fc γ Rs are divided into three classes designated Fc γ RI (CD64), Fc γ RII (CD32), and Fc γ RIII (CD16), which generate multiple isoforms, are recognized. The activating-type receptor either has or associates non-covalently with an accessory subunit that has an immunoreceptor tyrosine-based activation motif (ITAM) in its cytoplasmic domain. Fc γ RI binds IgG with high affinity and functions during early immune responses, whereas Fc γ RII and RIII are low affinity receptors that recognize IgG as aggregates surrounding multivalent antigens during late immune responses. Three genes for human Fc γ RII (A, B, and C) and one for mouse (Fc γ RIIB), encoding type I transmembrane proteins with ITAM motifs (Fc γ RII A and C) or ITIM motifs (Fc γ RIIB) in their cytoplasmic domains, have been identified. Human CD32, also known as Low affinity immunoglobulin γ Fc region receptor II-a (IgG Fc receptor II-a), Fc γ RII A or FCGR2A Protein, is expressed on cells of both myeloid and lymphoid lineages as well as on cells of non-hematopoietic origin. Associated with an ITAM-bearing adapter subunit, Fc γ R β , CD32a (Fc γ RII A) delivers an activating signal upon ligand binding, and results in the initiation of inflammatory responses including cytolysis, phagocytosis, degranulation, and cytokine production. The responses can be modulated by signals from the co-expressed inhibitory receptors such as Fc γ RII B, and the strength of the signal is dependent on the ratio of expression of the activating and inhibitory receptors.

Form:PBS

Molecular Weight:23.6 kDa

Sequences:Met 1-Met 210

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.