

## 32-7293: Recombinant Human Fc gamma RIla/FCGR2A/CD32a (C-6His)

**Gene :** FCGR2A

**Gene ID :** 2212

**Uniprot ID :** P12318

### Description

Source: Human Cells.

MW :21.61kD.

Recombinant Human Fc gamma RIla is produced by our Mammalian expression system and the target gene encoding Ala36-Ile218 is expressed with a 6His tag at the C-terminus. Receptors for the Fc region of IgG (Fc gamma R) are members of the Ig superfamily that function in the activation or inhibition of immune responses. Human Fc gamma Rs are divided into three classes designated Fc gamma RI (CD64), Fc gamma RII (CD32), and Fc gamma RIII (CD16), which generate multiple isoforms, are recognized. The activating type receptor either has or associates noncovalently with an accessory subunit that has an immunoreceptor tyrosinebased activation motif (ITAM) in its cytoplasmic domain. Fc gamma RI binds IgG with high affinity and functions during early immune responses, whereas Fc gamma RII and RIII are low affinity receptors that recognize IgG as aggregates surrounding multivalent antigens during late immune responses. Three genes for human Fc gamma RII (A, B, and C) and one for mouse (Fc gamma RIIB), encoding type I transmembrane proteins with ITAM motifs (Fc gamma RII A and C) or ITIM motifs (Fc gamma RIIB) in their cytoplasmic domains, have been identified. Human CD32, also known as Low affinity immunoglobulin gamma Fc region receptor II-a (IgG Fc receptor II-a), Fc gamma 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, FcR gamma , CD32a (Fc gamma 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 gamma RII B, and the strength of the signal is dependent on the ratio of expression of the activating and inhibitory receptors.

### Product Info

**Amount :** 10 µg / 50 µg

**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

**Amino Acid :** APPKAVLKLEPPWINVLQEDSVTLTCQGARSPESDSIQWFHNGNLIPTHTQPSYRKFANNNDSGEY  
TCQTGQTSLSDPVHLTVLSEWLVLQTPHLEFQEGETIMLRCHSWKDKPLVKVTFFQNGKSQKFSR  
LDPTFSIPQANHSHSGDYHCTGNIGYTLFSSKPVTITVQVPSMGSSSPMGIIVDHHHHH

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/Åµg (1 IEU/Åµg) as determined by LAL test.