

## 32-7395: Recombinant Human Fc gamma RIIIA/FCGR3A/CD16a (C-6His)

**Gene :** FCGR3A

**Gene ID :** 2214

**Uniprot ID :** P08637

### Description

Source: Human Cells.

MW :22.61kD.

Recombinant Human Fc gamma RIIIA is produced by our Mammalian expression system and the target gene encoding Gly17-Gln208 is expressed with a 6His tag at the C-terminus. Receptors for the Fc region of immunoglobulin G (Fc gamma R) are divided into three classes and Fc gamma RIII is a multifunctional, low/intermediate affinity receptor. In humans, Fc gamma RIII is expressed as two distinct forms (Fc gamma RIIIA and Fc gamma RIIIB) that are encoded by two different but highly homologous genes in a cell type-specific manner. Fc gamma RIIIB is a low-affinity, GPI-linked receptor expressed by neutrophils and eosinophils, whereas Fc gamma RIIIA is an intermediate affinity polypeptide-anchored transmembrane glycoprotein expressed by a subset of T lymphocytes, natural killer (NK) cells, monocytes, and macrophages. The Fc gamma RIIIA receptor is involved in phagocytosis, secretion of enzymes, inflammatory mediators, antibody-dependent cellular cytotoxicity (ADCC), mast cell degranulation, and clearance of immune complexes. Fc gamma RIIIA has an immunoreceptor tyrosine-based activation motif (ITAM) in its cytoplasmic domain and delivers an activation signal in the immune responses. Aberrant expression or mutations in this gene is implicated in susceptibility to recurrent viral infections, systemic lupus erythematosus, and alloimmune neonatal neutropenia. In humans, it is a 50 -70 kD type I transmembrane activating receptor. The Fc gamma RIIIA cDNA encodes 254 amino acid including a 16aa signal sequence, 191 amino acid ECD with two C2-type Ig-like domains, five potential N-glycosylation sites, a 22 amino acid transmembrane sequence and a 25 amino acid cytoplasmic domain.

### Product Info

**Amount :** 10 µg / 50 µg

**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

**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 :** GMRTEDLPKAVVFLEPQWYRVLEKDSVTLKCOGAYSPEDNSTQWFHNESLISSQASSYFIDAATVDDSGEYRC QTNLSTLSDPVQLEVHIGWLLLQAPRWVFKEDPIHLRCHSWKNTALHKVTYLQNGKGRKYFHHNSDFYIPKAT LKDSGSYFCRGLVGSKNVSETVNITITQGLAVSTISSFFPPGYQHSHHHHH

### 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 Åµg/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.