

## Technical Data Sheet

### Human CD32a R167 /Fc gamma RIIa (C-His)

**Catalog Number:** 820301, 820302

**Size:** 25 ug, 100 ug

**Target Name:** CD32a, FCGR2A, CD32, FCG2 , FCGR2A1, IGFR2

**Regulatory Status:** RUO

#### Product Details

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**Application:** ELISA, BLI

**Format:** Liquid, Purified

**Expression Host:** CHO

**Species:** Human

**Sources:** Recombinant CD32a R167 /Fc gamma RIIa (Ala 36 - Ile 218) with C-terminus His-tag is expressed in CHO cell.

**Accession Number:** Q92835

**Molecular Weight:** The protein has a predicted molecular weight of 21.9 kDa. Under DTT-reducing conditions, it migrates at approximately 35 kDa on SDS-PAGE.

**Affinity Tag:** C-His

**Purity:** >95% based on SDS-PAGE under reducing condition

**Formulation:** 1xPBS buffer, pH7.4, 0.22 µm filtered

**Endotoxin level:** Less than 0.1 EU/µg protein as determined by the LAL method

**Protein Concentration:** 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

**Storage and Handling:** Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

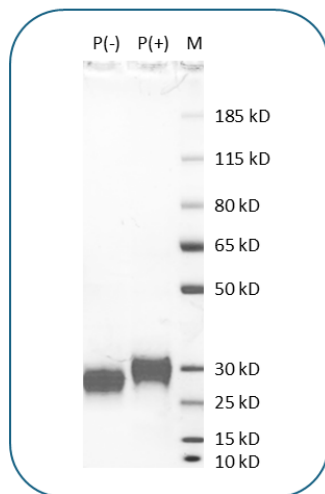
#### Background Information

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FcγRII, or CD32, is a low-affinity receptor for IgG Fc region. In human, it is expressed as three isoforms (A, B, C). The activating isoform, FcγRIIA (CD32a), is found on monocytes, macrophages, granulocytes, platelets, and mast cells. It features an extracellular domain, transmembrane region, and a cytoplasmic tail with a non-classical ITAM, crucial for dimerization and signaling. FcγRIIA plays a key role in inflammation, phagocytosis, and platelet activation, influencing conditions like thrombocytopenia, rheumatoid arthritis, and lupus. Its activity is modulated by lipid rafts, and the receptor's affinity for IgG subclasses varies.

#### Product Data

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Human CD32a R167 /Fc gamma RIIa (C-His) on SDS-PAGE under reducing condition (P+) and non-reducing condition (P-). The purity of this protein appears to be greater than 95%.