

## APC Human CD32a H167 (FcγRIIA) Protein (C-His)

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| <b>Catalog Number:</b>    | 820103, 820104                             |
| <b>Size:</b>              | 25 ug, 100 ug                              |
| <b>Target Name:</b>       | CD32a, FCGR2A, CD32, FCG2 , FCGR2A1, IGFR2 |
| <b>Regulatory Status:</b> | RUO  |

### PRODUCT DETAILS

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| <b>Application:</b>           | Flow Cytometry   |
| <b>Format:</b>                | Liquid, APC  |
| <b>Expression Host:</b>       | CHO  |
| <b>Species:</b>               | Human  |
| <b>Sources:</b>               | Recombinant CD32a H167 /Fc gamma RIIa (Ala 36 - Ile 218) with C-terminus His-tag is expressed in CHO cell and conjugated to APC.                               |
| <b>Accession Number:</b>      | Q92835   |
| <b>Molecular Weight:</b>      | The protein has a predicted molecular weight of 21.9 kDa. Under DTT-reducing conditions, it migrates at approximately 35 kDa on SDS-PAGE prior to conjugation. |
| <b>Affinity Tag:</b>          | C-His  |
| <b>Formulation:</b>           | 1xPBS buffer, pH7.4, 0.09% NaN3 with a carrier protein   |
| <b>Endotoxin level:</b>       | Not tested   |
| <b>Protein Concentration:</b> | 25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.  |
| <b>Storage and Handling:</b>  | Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2-8°C for up to six months.  |

### 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. A polymorphism (R167H) impacts FcγRIIA's binding to IgG2 but not other subclasses