Recombinant FCGR1 protein (His tag)

Catalog Number	546763
Synonyms	IgG Fc receptor I; Fc-gamma RI; FcRI; Fc-gamma RIA; FcgammaRIa; CD antigen CD64
Species	Human
Expression System	E. coli
Accession	P12314
Molecular Weight	Predictes a molecular mass of 32.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	16-292
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 16-292 aa (P12314) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human FCGR1A (CD64) Fragment (aa 16-292) – a high-quality protein fragment encompassing the three Ig-like C2-type domains of the High Affinity Immunoglobulin Gamma Fc Receptor I. This product is engineered for studying IgG Fc binding, antibody-dependent cellular cytotoxicity (ADCC), and innate immune responses in a purified, functional format. The full-length High Affinity Immunoglobulin Gamma Fc Receptor I (FCGR1A/CD64) is a key mediator in both innate and adaptive immunity, serving as a high-affinity receptor for IgG Fc regions. It is primarily expressed on monocytes and triggers effector functions such as ADCC against virus-infected cells. Located at the cell membrane as a single-pass type I membrane protein, its stability is enhanced through interaction with FCER1G. This receptor plays a critical role in immune surveillance and pathogen clearance by facilitating IgG-mediated responses.