Recombinant GRAN protein (His tag)

Catalog Number	542243
Species	Human
Expression System	E. coli
Accession	P28676
Molecular Weight	Predictes a molecular mass of 20.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	53-217
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 53-217 aa (P28676) 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 Grancalcin Fragment (53-217) is a high-purity protein designed for studying the calcium-binding functionality of Grancalcin. This fragment specifically encompasses EF-hand domains 2, 3, and 4, making it an ideal tool for investigating calcium-mediated cellular processes such as neutrophil adhesion and focal adhesion formation. Grancalcin, encoded by the GCA gene, is a calcium-binding protein implicated in neutrophil adhesion to fibronectin and the formation of focal adhesions. In its full-length form, it is primarily cytosolic in the absence of calcium or magnesium ions but relocates to granule membranes and other cellular membranes upon elevation of these ions, highlighting its role in calcium-dependent signaling and membrane interactions. This dynamic subcellular localization underscores its importance in immune cell function and adhesion mechanisms.