Recombinant AGRF1 protein (His tag)

Catalog Number	545156
Synonyms	G protein-coupled receptor 110; G protein-coupled receptor KPG_012; ADGRF1 N-terminal fragment; ADGRF1 C-terminal fragment
Species	Human
Expression System	E. coli
Accession	Q5T601
Molecular Weight	Predictes a molecular mass of 49.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	149-583
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 149-583 aa (Q5T601) 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 Adhesion G-protein coupled receptor F1 (ADGRF1) Fragment (aa 149-583): A high-purity protein fragment designed for studying the GAIN domain and its role in G protein-coupled receptor signaling, neuronal development, and metabolic regulation. Adhesion G-protein coupled receptor F1 (ADGRF1) is a multi-pass membrane protein primarily located in the cell membrane that functions as a receptor for N-docosahexaenoylethanolamine (synaptamide), an omega-3 fatty acid lipid enriched in the brain. Upon ligand binding, ADGRF1 undergoes conformational changes that activate G protein signaling pathways, primarily coupling to G(s) proteins to mediate adenylate cyclase activation. The receptor plays crucial roles in neuronal development and cognitive function, with additional involvement in hepatic fat accumulation. The provided fragment (aa 149-583) contains the complete GAIN domain (aa 437-579), which is essential for the structural and functional integrity of adhesion GPCRs, making this recombinant protein an ideal tool for investigating domain-specific mechanisms in receptor signaling and function.