Recombinant LIPA2 protein (His tag)

Catalog Number	537290
Synonyms	Protein tyrosine phosphatase receptor type f polypeptide-interacting protein alpha-2; PTPRF-interacting protein alpha-2
Species	Human
Expression System	E. coli
Accession	O75334
Molecular Weight	Predictes a molecular mass of 21.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	1017-1181
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1017-1181 aa (O75334) 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 Liprin-alpha-2 Fragment (aa 1017-1181) - A specialized research tool containing the complete SAM 2 and SAM 3 domains, designed for investigating the specific molecular functions of these critical structural regions in neuronal scaffolding and cellular localization mechanisms. Liprin-alpha-2 (PPFIA2) is a key scaffolding protein that regulates the cellular localization and clustering of PTPRF (protein tyrosine phosphatase receptor type F). It plays crucial roles in focal adhesion disassembly and serves as an immobile postsynaptic scaffold in neuronal dendritic spines, where it recruits KIF1A-driven dense core vesicles. The protein localizes to multiple cellular compartments including the cytoplasm, cell surface, and specifically within dendritic spines, where it colocalizes with PTPRF at the cell surface. This strategic localization enables Liprin-alpha-2 to regulate interactions between receptor-like tyrosine phosphatases and their extracellular environment while facilitating substrate associations.