Recombinant MPP3 protein (His tag)

Catalog Number	538016
Synonyms	Discs large homolog 3; Protein MPP3
Species	Human
Expression System	E. coli
Accession	Q13368
Molecular Weight	Predictes a molecular mass of 35.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	1-302
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 1-302 aa (Q13368) 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 MAGUK p55 subfamily member 3 (MPP3) Fragment (residues 1-302) is a high-purity protein designed to encompass the complete L27 1, L27 2, PDZ, and SH3 domains. This fragment serves as an essential tool for investigating domain-specific interactions, cell signaling pathways, and protein complex formation in cellular studies. The full-length MAGUK p55 subfamily member 3 (Discs large homolog 3) protein, encoded by the MPP3 gene, plays a critical role in cell signaling and adhesion. It participates in cell spreading through the phosphoinositide-3-kinase (PI3K) pathway by connecting CADM1 to DLG1 and the regulatory subunit of PI3K. Additionally, it stabilizes HTR2C at the plasma membrane to prevent desensitization and may contribute to the maintenance of adherens junctions. The protein localizes to the cell membrane, apical cell membrane, and adherens junctions, with specific presence in apical villi of Mueller glia cells, the developing cortex, and retinal structures such as the outer limiting membrane and outer plexiform layer, underscoring its importance in cellular architecture and signaling networks.