Recombinant FRPD2 protein (His tag)

Catalog Number	542882
Synonyms	PDZ domain-containing protein 4; PDZ domain-containing protein 5C
Species	Human
Expression System	E. coli
Accession	Q68DX3
Molecular Weight	Predictes a molecular mass of 12.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	1075-1172
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1075-1172 aa (Q68DX3) 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 FRMPD2 PDZ Domain Fragment (aa 1075-1172) – a high-purity protein fragment encompassing the PDZ 3 domain, designed for studying synaptic transmission, tight junction regulation, and immune signaling pathways in research applications. The full-length FERM and PDZ domain-containing protein 2 (FRMPD2) functions as a scaffold protein involved in N-methyl-D-aspartic acid receptor (NMDAR)-mediated synaptic excitatory transmission and may contribute to synapse formation in cone photoreceptor cells. It also plays a role in regulating tight junction formation and NOD2-mediated NF-kappa-B activation during immune responses, binding phosphatidylinositol 3,4-bisphosphate. FRMPD2 localizes to the cytoplasm, basolateral cell membrane, tight junctions, and postsynaptic densities, where it interacts with proteins like CTNNB1, CDH1, PKP4, TJP1, and NOD2. The provided fragment (aa 1075-1172) contains the PDZ 3 domain, enabling focused investigation of domain-specific functions in cellular signaling and scaffolding mechanisms.