Recombinant FRPD4 protein (His tag)

Catalog Number	538072
Synonyms	PDZ domain-containing protein 10; PSD-95-interacting regulator of spine morphogenesis; Preso
Species	Human
Expression System	E. coli
Accession	Q14CM0
Molecular Weight	Predictes a molecular mass of 56.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 57 kDa band.

Product Information

Sequence Region	38-525
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 38-525 aa (Q14CM0) 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	Introducing the recombinant FERM and PDZ domain-containing protein 4 (FRMPD4) fragment (residues 38-525), a high-purity tool engineered to encompass the complete PDZ and FERM domains. This product is ideal for investigating dendritic spine morphogenesis, synaptic transmission, and phosphoinositide interactions, offering researchers a targeted approach to study these critical functional domains in neuroscience and cell biology. FERM and PDZ domain-containing protein 4, also known as Preso, is a key regulator of dendritic spine morphogenesis and density in humans, essential for maintaining excitatory synaptic transmission. It localizes to dendritic spines, where it binds phosphatidylinositol 4,5-bisphosphate, highlighting its role in neuronal structure and signaling. The full-length protein's involvement in spine dynamics underscores its significance in synaptic plasticity and potential implications for neurological disorders.