Recombinant FRM4B protein (His tag)

Catalog Number	548871
Synonyms	GRP1-binding protein GRSP1
Species	Human
Expression System	E. coli
Accession	Q9Y2L6
Molecular Weight	Predictes a molecular mass of 46.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	1-383
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 1-383 aa (Q9Y2L6) 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 FRMD4B (FERM domain-containing protein 4B) Fragment (aa 1-383) - A high-purity protein fragment encompassing the complete FERM domain, ideal for studying insulin receptor signaling complexes and epithelial cell polarity mechanisms. FRMD4B (FERM domain-containing protein 4B), also known as GRP1-binding protein GRSP1, functions as a key member of GRP1 signaling complexes that are acutely recruited to plasma membrane ruffles in response to insulin receptor signaling. This protein serves as a scaffolding protein that regulates epithelial cell polarity by connecting ARF6 activation with the PAR3 complex, playing a redundant role with FRMD4A in epithelial polarization processes. FRMD4B localizes to multiple cellular compartments including the cytoplasm (cytoskeleton), tight junctions, and adherens junctions, where it colocalizes with PARD3. This strategic subcellular distribution underscores its critical role in maintaining cell junction integrity and coordinating polarity signaling pathways in epithelial tissues.