Recombinant DYSF protein (His tag)

Catalog Number	546568
Synonyms	Dystrophy-associated fer-1-like protein; Fer-1-like protein 1
Species	Human
Expression System	E. coli
Accession	O75923
Molecular Weight	Predictes a molecular mass of 15.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-128
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-128 aa (O75923) 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 Dysferlin (DYSF) fragment (amino acids 1-128), a high-purity protein designed for studying the C2 1 domain's role in calcium-triggered membrane fusion and sarcolemma repair mechanisms in human skeletal and cardiac muscle research. Dysferlin, encoded by the DYSF gene, functions as a critical calcium ion sensor that mediates synaptic vesicle-plasma membrane fusion and facilitates rapid resealing of mechanically disrupted membranes in skeletal muscle and cardiomyocytes. It localizes to the sarcolemma, cytoplasmic vesicles, and T-tubule systems, where it interacts with proteins like BIN1, AHNAK, and CACNA1S. Dysferlin accumulates at injury sites in a calcium-dependent manner, highlighting its essential role in membrane repair processes relevant to muscular dystrophy research.