Recombinant POPD2 protein (His tag)

Catalog Number	549098
Synonyms	Popeye protein 2
Species	Human
Expression System	E. coli
Accession	Q9HBU9
Molecular Weight	Predictes a molecular mass of 21.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	98-264
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 98-264 aa (Q9HBU9) 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 Popeye domain-containing protein 2 (POPDC2) fragment (residues 98-264) from Homo sapiens, designed for structural and biochemical studies. This 167-amino acid fragment is a stable, soluble unit ideal for investigating the protein's role in cardiac function and heart rate regulation. Popeye domain-containing protein 2 (POPDC2), encoded by the gene POPDC2, is crucial for maintaining cardiac function in humans. It regulates heart rate dynamics through cAMP-binding and enhances cell surface expression of the potassium channel KCNK2, thereby increasing current density. The protein localizes to the membrane as a multi-pass membrane protein, specifically at the cell membrane and sarcolemma, underscoring its importance in cardiac cellular signaling and membrane-associated processes.