Recombinant ARM12 protein (His tag)

Catalog Number	538209
Species	Human
Expression System	E. coli
Accession	Q5T9G4
Molecular Weight	Predictes a molecular mass of 40.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	1-340
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-340 aa (Q5T9G4) 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 ARMC12 (Armadillo repeat-containing protein 12) fragment (amino acids 1-340) is a high-quality protein product designed for structural and functional studies. This fragment represents a stable, soluble unit of ARMC12, essential for investigating its roles in mitochondrial sheath formation in sperm and its implications in cancer cell growth and transcriptional regulation. ARMC12 is a human protein critical for male fertility, where it supports mitochondrial sheath formation during sperm development by enabling proper mitochondrial elongation and coiling along the flagellum. Additionally, ARMC12 enhances neuroblastoma cell growth and aggressiveness by increasing EZH2 activity and H3K27me3 levels via RBBP4, facilitating polycomb repressive complex 2-mediated transcriptional repression of tumor suppressors. The protein localizes to the nucleus and the mitochondrial outer membrane as a peripheral membrane protein, underscoring its dual roles in cellular regulation and disease pathways.