Recombinant CMC2 protein (His tag)

Catalog Number	535829
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q20799
Gene ID	186276
Molecular Weight	Predictes a molecular mass of 17.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	71-206
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 71-206 aa (Q20799) 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 protein fragment of the Putative calcium-binding mitochondrial carrier F55A11.4 from Caenorhabditis elegans, encompassing amino acids 71-206. This fragment includes the three EF-hand domains (EF-hand 1, EF-hand 2, and EF-hand 3), making it an ideal tool for investigating calcium-binding mechanisms and domain-specific functions in mitochondrial transport. The full-length Putative calcium-binding mitochondrial carrier F55A11.4 is a mitochondrial and calcium-binding carrier protein that catalyzes the calcium-dependent exchange of cytoplasmic glutamate with mitochondrial aspartate across the mitochondrial inner membrane. This exchange is critical for cellular metabolism and calcium signaling. The protein is localized to the mitochondrial inner membrane, where it functions as a multi-pass membrane protein, facilitating substrate transport essential for energy production and homeostasis. The EF-hand domains within this fragment are key for calcium binding, enabling studies on their structural and functional roles in mitochondrial carrier activity.