Recombinant UNC36 protein (His tag)

Catalog Number	533211
Synonyms	Pharyngeal calcium channel subunit alpha-2; Uncoordinated protein 36
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	P34374
Gene ID	176155
Molecular Weight	Predictes a molecular mass of 58.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 61 kDa band.

Product Information

Sequence Region	20-506
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 20-506 aa (P34374) 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 Voltage-dependent calcium channel unc-36 fragment (amino acids 20-506) from Caenorhabditis elegans, encompassing the complete VWFA domain (250-479). This high-purity fragment serves as an essential tool for investigating calcium channel function, neuronal signaling, and domain-specific mechanisms in C. elegans research models. The full-length Voltage-dependent calcium channel unc-36 protein functions as an auxiliary subunit of the unc-2 voltage-gated calcium channel, triggering calcium-activated signaling pathways that regulate serotonin response and motor coordination. It plays critical roles in neural depolarization-induced calcium influx, pharyngeal pumping, and asymmetric expression of olfactory receptors in AWC neurons. As a single-pass type I membrane protein localized to the membrane, unc-36 is involved in both neuronal and muscle cell functions, with mutations leading to egg-laying defects and uncoordinated movement phenotypes.