Recombinant ACH4 protein (His tag)

Catalog Number	534299
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O76554
Gene ID	179574
Molecular Weight	Predictes a molecular mass of 28.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	20-239
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 20-239 aa (O76554) 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 Acetylcholine receptor subunit alpha-type des-2 (fragment 20-239) from Caenorhabditis elegans is a high-purity, stable protein fragment designed for structural and biochemical studies. This product captures a soluble and functional region of the neuronal acetylcholine receptor, enabling research into choline-mediated chemotaxis and ion channel mechanisms. The full-length Acetylcholine receptor subunit alpha-type des-2, encoded by the des-2 gene, functions as a subunit of the non-synaptic neuronal acetylcholine receptor (AChR) in Caenorhabditis elegans. It plays a critical role in chemotaxis toward choline by binding acetylcholine or choline, triggering conformational changes that open an ion-conducting channel across the plasma membrane. This receptor is localized to the cell membrane as a multi-pass membrane protein and is enriched in the sensory endings of sensory neurons, highlighting its importance in neuronal signaling and sensory perception.