Recombinant IP3KH protein (His tag)

Catalog Number	534612
Synonyms	Inositol 1,4,5-trisphosphate 3-kinase homolog; IP3 3-kinase; IP3K; InsP 3-kinase; let-23 fertility effector 2
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q95Q62
Gene ID	172128
Molecular Weight	Predictes a molecular mass of 36.59 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	192-494
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 192-494 aa (Q95Q62) 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 Inositol-trisphosphate 3-kinase homolog (lfe-2) fragment (residues 192-494) from Caenorhabditis elegans, a stable and soluble protein unit ideal for structural studies and biochemical assays investigating inositol phosphate metabolism and signaling pathways. The full-length Inositol-trisphosphate 3-kinase homolog (IP3K) in Caenorhabditis elegans plays a critical role in regulating cellular processes by modulating inositol 1,4,5-trisphosphate levels. It negatively regulates posterior body wall muscle contractions essential for defecation and participates in the let-23 signaling pathway to control spermathecal dilation and ovulation. Evidence also suggests its involvement in ovulation regulation downstream of the actin cross-linker fln-1, highlighting its importance in key developmental and physiological functions. This protein is a valuable model for studying conserved signaling mechanisms in eukaryotes.