Recombinant CSP2 protein (His tag)

Catalog Number	532889
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9TZP5
Gene ID	177391
Molecular Weight	Predictes a molecular mass of 17.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	9-145
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 9-145 aa (Q9TZP5) 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 C. elegans Putative Inactive Caspase B Fragment (residues 9-145) - A stable, soluble protein fragment ideal for structural and biochemical studies of caspase regulation mechanisms in germline apoptosis and fertility. The full-length Putative Inactive Caspase B (csp-2 gene) functions as a key regulator in Caenorhabditis elegans germline apoptosis. Isoform b binds to caspase ced-3 zymogen and prevents its autoactivation, thereby negatively regulating germline apoptosis while not affecting mature ced-3 caspase activity or ced-4-mediated activation. This protein plays a crucial role in fertility maintenance and is localized in the cytoplasm. Isoform a, while also identified as a putative inactive caspase, appears dispensable for germline apoptosis inhibition. The protein undergoes cleavage into three subunits: p31, p17, and p14, highlighting its complex regulatory mechanisms in cell death pathways.