Recombinant CIC protein (His tag)

Catalog Number	532890
Synonyms	Protein fettucine
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9U1H0
Gene ID	53560
Molecular Weight	Predictes a molecular mass of 10.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	488-559
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 488-559 aa (Q9U1H0) 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 Putative transcription factor capicua (Protein fettucine) fragment (residues 488-559) from Drosophila melanogaster, a stable and soluble unit ideal for structural and biochemical studies of this key transcriptional repressor in embryonic development. The full-length Putative transcription factor capicua (encoded by the cic gene) is a transcriptional repressor essential for specifying numerous cell types during embryonic development in Drosophila melanogaster. It functions in terminal patterning of early embryos, where it associates with gro to repress tll and hkb, restricting their expression to embryonic terminal poles to initiate proper head and tail development. Additionally, it participates in dorsoventral patterning by cooperating with dl to repress dorsal-specific genes like zen and promoting expression of the ventralizing factor pip in ovarian follicle cells. During wing development, it specifies intervein areas by locally repressing vein-specific genes such as aos, dpp, and vvl. The protein is localized to the nucleus, consistent with its role in transcriptional regulation. The fragment (residues 488-559) was computationally selected to represent a stable, soluble region for structural and biochemical analyses.