Recombinant CUT protein (His tag)

Catalog Number	533158
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P10180
Gene ID	44540
Molecular Weight	Predictes a molecular mass of 15.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	865-992
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 865-992 aa (P10180) 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 Homeobox protein cut (ct) fragment (865-992) from Drosophila melanogaster. This 128-amino acid fragment represents a stable, soluble unit ideal for structural studies and biochemical assays investigating cell fate specification mechanisms. Homeobox protein cut functions as a critical regulator of cell fate decisions in multiple lineages, particularly as a determination factor specifying sensory organ identity in precursor cells. It also contributes to cell type specification in Malpighian tubules. Notably, absence of the cut gene transforms external sensory organs into chordotonal organs, highlighting its essential role in cellular identity determination. The protein is localized to the nucleus, consistent with its function as a transcriptional regulator.