Recombinant CYCL protein (His tag)

Catalog Number	533122
Synonyms	Brain and muscle ARNT-like 1; BMAL1; MOP3
Species	Drosophila melanogaster
Expression System	E. coli
Accession	O61734
Gene ID	40162
Molecular Weight	Predictes a molecular mass of 26.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-215
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-215 aa (O61734) 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 Drosophila melanogaster Protein cycle (BMAL1) fragment (amino acids 1-215), encompassing the complete bHLH and PAS 1 domains. This high-purity protein is an essential tool for investigating circadian rhythm regulation and transcriptional activation mechanisms in fruit fly models. Protein cycle (BMAL1) functions as a key transcription factor in generating biological rhythms in Drosophila melanogaster. It activates cyclic transcription of Period (PER) and Timeless (TIM) genes by binding to E-box promoter elements (5'-CACGTG-3'). The protein is localized to the nucleus, where it executes its transcriptional regulatory functions. This recombinant fragment specifically contains the bHLH (amino acids 30-83) and PAS 1 (amino acids 104-175) domains, enabling focused study of DNA binding and protein interaction capabilities central to circadian clock mechanisms.