Recombinant MIDN protein (His tag)

Catalog Number	533747
Synonyms	Protein stuxnet
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q8SXD4
Gene ID	32005
Molecular Weight	Predictes a molecular mass of 15.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	67-193
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 67-193 aa (Q8SXD4) 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 Midnolin homolog (Protein stuxnet) fragment (residues 67-193) from Drosophila melanogaster, encompassing the complete Ubiquitin-like domain. This high-purity fragment serves as an essential tool for investigating the ubiquitin-independent proteasomal degradation mechanisms mediated by this critical regulatory protein. Midnolin homolog (Protein stuxnet), encoded by the stx gene in Drosophila melanogaster, plays a crucial role in protein degradation pathways by facilitating ubiquitin-independent proteasomal degradation of polycomb protein Pc. The protein achieves this function through direct interaction with the proteasome, effectively recruiting Pc for degradation. This mechanism represents an important alternative to ubiquitin-dependent degradation pathways in cellular regulation. The protein is localized exclusively to the nucleus, where it executes its regulatory functions in protein turnover and cellular homeostasis.