Recombinant SEM1 protein (His tag)

Catalog Number	534902
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VM46
Gene ID	50428
Molecular Weight	Predictes a molecular mass of 11.04 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	1-79
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 1-79 aa (Q9VM46) 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	Introducing the recombinant Drosophila melanogaster Probable 26S Proteasome Complex Subunit Sem1 (Fragment 1-79), a high-quality protein fragment designed for structural and biochemical research. This 79-amino acid fragment represents a stable, soluble unit of the Sem1 protein, optimized for studies in ubiquitin-dependent proteolysis pathways. The full-length Probable 26S Proteasome Complex Subunit Sem1, encoded by the Sem1 gene in Drosophila melanogaster, functions as a critical component of the 26S proteasome. It plays an essential role in ubiquitin-dependent proteolysis, a fundamental process for targeted protein degradation that regulates numerous cellular functions, including cell cycle progression, signal transduction, and quality control of protein folding. This proteasomal activity is vital for maintaining cellular homeostasis and is implicated in various disease mechanisms. The provided fragment (residues 1-79) encompasses the entire functional region of the protein, making it an ideal tool for investigating its structural properties and biochemical interactions within the proteasome complex.