Recombinant PRS8 protein (His tag)

Catalog Number	534479
Synonyms	26S proteasome AAA-ATPase subunit rpt-6; Proteasome regulatory particle ATPase-like protein 6
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9XTT9
Gene ID	176661
Molecular Weight	Predictes a molecular mass of 47.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 51 kDa band.

Product Information

Sequence Region	1-416
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-416 aa (Q9XTT9) 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 26S proteasome regulatory subunit 8 (rpt-6) fragment from Caenorhabditis elegans, encompassing amino acids 1-416. This high-purity protein is ideal for studying proteasome function, ATP-dependent degradation mechanisms, and infection response pathways in biochemical and structural research applications. The 26S proteasome regulatory subunit 8 (rpt-6) is an essential component of the 26S proteasome complex, which mediates ATP-dependent degradation of ubiquitinated proteins to maintain cellular protein homeostasis. This multifunctional complex eliminates misfolded or damaged proteins and regulates critical processes including cell cycle progression, apoptosis, and DNA damage repair. As part of the AAA-ATPase ring, rpt-6 facilitates substrate unfolding and translocation into the proteolytic chamber. Additionally, it plays a specialized role in immune response by binding transcription factor elt-2 to modulate gene expression during Gram-negative bacterial infections. The protein localizes to both cytoplasm and nucleus, reflecting its diverse cellular functions. The recombinant fragment (1-416) represents a stable, soluble unit optimized for structural and functional studies.