Recombinant PRS8 protein (His tag)

Catalog Number	547133
Synonyms	26S proteasome AAA-ATPase subunit RPT6; Proteasome 26S subunit ATPase 5; Proteasome subunit p45; Thyroid hormone receptor-interacting protein 1; TRIP1; p45/SUG
Species	Human
Expression System	E. coli
Accession	P62195
Molecular Weight	Predictes a molecular mass of 47.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 51 kDa band.

Product Information

Sequence Region	2-406
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 2-406 aa (P62195) 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 Human 26S Proteasome Regulatory Subunit 8 (PSMC5) Fragment (residues 2-406) is a high-quality protein product designed for structural and biochemical studies. This fragment encompasses a stable and soluble domain of the ATPase subunit RPT6, optimized for research applications requiring reliable protein function and integrity. The full-length 26S proteasome regulatory subunit 8, encoded by the PSMC5 gene, is a critical component of the 26S proteasome complex, which mediates ATP-dependent degradation of ubiquitinated proteins. This process is essential for maintaining cellular protein homeostasis by eliminating misfolded, damaged, or obsolete proteins, thereby supporting vital processes such as cell cycle regulation, apoptosis, and DNA repair. As part of the AAA-ATPase ring, PSMC5 facilitates the unfolding and translocation of target proteins into the proteolytic chamber for degradation. The protein is localized in both the cytoplasm and nucleus, underscoring its broad role in cellular function. The provided fragment represents a computationally selected region predicted to retain stability and solubility, making it ideal for investigating proteasome mechanisms in vitro.