Recombinant PRS6A protein (His tag)

Catalog Number	544447
Synonyms	26S proteasome AAA-ATPase subunit RPT5; Proteasome 26S subunit ATPase 3; Proteasome subunit P50; Tat-binding protein 1; TBP-1
Species	Human
Expression System	E. coli
Accession	P17980
Molecular Weight	Predictes a molecular mass of 47.04 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	35-439
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 35-439 aa (P17980) 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	This product is a recombinant fragment of the 26S proteasome regulatory subunit 6A (also known as PSMC3, Proteasome subunit P50, or TBP-1) from Homo sapiens, encompassing residues 35-439. It is designed as a stable, soluble unit ideal for structural studies, biochemical assays, and investigating the ATP-dependent protein degradation machinery of the 26S proteasome. The full-length 26S proteasome regulatory subunit 6A (PSMC3) is a critical component of the 26S proteasome, a multiprotein complex responsible for the ATP-dependent degradation of ubiquitinated proteins. This process is essential for maintaining cellular protein homeostasis by eliminating misfolded, damaged, or obsolete proteins, thereby regulating key processes such as cell cycle progression, apoptosis, and DNA damage repair. As part of the AAA-ATPase ring, PSMC3 facilitates the unfolding of ubiquitinated targets for proteolytic degradation. The protein is localized in both the cytoplasm and nucleus, and it has been observed to colocalize with TRIM5 in cytoplasmic bodies, underscoring its involvement in diverse cellular activities.