Recombinant PSMA8 protein (His tag)

Catalog Number	548793
Synonyms	Proteasome alpha 4 subunit; Alpha4s; Proteasome subunit alpha-type 7-like
Species	Human
Expression System	E. coli
Accession	Q8TAA3
Molecular Weight	Predictes a molecular mass of 30.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	1-256
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-256 aa (Q8TAA3) 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 Proteasome subunit alpha-type 8 (PSMA8) fragment (amino acids 1-256) is a high-quality protein product designed for structural and biochemical studies. This fragment represents a stable and soluble unit of the protein, ideal for investigating its role in the spermatoproteasome and meiotic progression during spermatogenesis. Proteasome subunit alpha-type 8 (PSMA8) is a key component of the spermatoproteasome, a specialized proteasome complex found in testis that facilitates acetylation-dependent degradation of histones, enabling histone exchange critical for spermatogenesis. As part of the proteasome, it contributes to the degradation of unneeded or damaged proteins via proteolysis. PSMA8 is essential for assembling the 20S core proteasome and is required for degrading meiotic proteins RAD51 and RPA1 during late prophase I, promoting the progression of meiosis I in spermatogenesis. It localizes to the nucleus, specifically to the central region of the synaptonemal complex, a structure that maintains homologous chromosome pairs in synapsis during meiotic prophase I, underscoring its importance in reproductive biology.