Recombinant PSA4 protein (His tag)

Catalog Number	546875
Synonyms	Macropain subunit C9; Multicatalytic endopeptidase complex subunit C9; Proteasome component C9; Proteasome subunit L; Proteasome subunit alpha-3; alpha-3
Species	Human
Expression System	E. coli
Accession	P25789
Molecular Weight	Predictes a molecular mass of 31.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	1-261
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 1-261 aa (P25789) 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 Proteasome Subunit Alpha Type-4 (PSMA4) Fragment (1-261) from Homo sapiens is a high-purity protein fragment engineered for stability and solubility, ideal for structural studies, biochemical assays, and proteasome function research. The full-length Proteasome Subunit Alpha Type-4 (PSMA4) is a critical component of the 20S core proteasome complex, which mediates the proteolytic degradation of most intracellular proteins. By associating with regulatory particles such as 19S, PA200, or PA28, it forms complexes like the 26S proteasome that facilitate ATP-dependent degradation of ubiquitinated proteins, maintaining cellular protein homeostasis, and ubiquitin-independent pathways involved in spermatogenesis and MHC class I antigen presentation. PSMA4 localizes to both the cytoplasm and nucleus, translocating to the nucleus upon interaction with AKIRIN2, underscoring its role in essential cellular processes including protein quality control and immune response.