Recombinant PSB6 protein (His tag)

Catalog Number	544529
Synonyms	Macropain delta chain; Multicatalytic endopeptidase complex delta chain; Proteasome delta chain; Proteasome subunit Y; Proteasome subunit beta-1; beta-1
Species	Human
Expression System	E. coli
Accession	P28072
Molecular Weight	Predictes a molecular mass of 23.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	35-239
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 35-239 aa (P28072) 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 beta type-6 (PSMB6) fragment (residues 35-239) from Homo sapiens, a stable and soluble unit ideal for structural and biochemical studies of the 20S proteasome core complex and its role in intracellular protein degradation. Proteasome subunit beta type-6 (PSMB6) is a critical component of the 20S core proteasome complex, which mediates the proteolytic degradation of most intracellular proteins. As part of the 26S proteasome with 19S regulatory particles, it facilitates ATP-dependent degradation of ubiquitinated proteins, maintaining protein homeostasis by removing misfolded, damaged, or unnecessary proteins. PSMB6 exhibits peptidylglutamyl-hydrolyzing (postacidic or caspase-like) activity, cleaving peptide bonds after acidic residues. The protein is localized in both the cytoplasm and nucleus, translocating to the nucleus via interaction with AKIRIN2 and IPO9, underscoring its importance in diverse cellular processes such as protein quality control and antigen presentation.