Recombinant PSB8 protein (His tag)

Catalog Number	546885
Synonyms	Low molecular mass protein 7; Macropain subunit C13; Multicatalytic endopeptidase complex subunit C13; Proteasome component C13; Proteasome subunit beta-5i; Really interesting new gene 10 protein
Species	Human
Expression System	E. coli
Accession	P28062
Molecular Weight	Predictes a molecular mass of 24.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	73-276
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 73-276 aa (P28062) 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 beta type-8 (PSMB8) Fragment (aa 73-276) - A high-quality, stable protein fragment ideal for immunoproteasome research, antigen processing studies, and biochemical characterization. This 204-amino acid fragment represents a structurally optimized domain of the proteasome beta-5i subunit, providing researchers with a soluble and functional protein unit for investigating proteasomal activity and immune response pathways. The full-length Proteasome subunit beta type-8 (PSMB8) is a critical component of the immunoproteasome, a specialized multicatalytic proteinase complex essential for antigen processing and generation of class I binding peptides. This subunit demonstrates unique cleavage specificity for peptides after hydrophobic and basic residues, significantly enhancing the immunoproteasome's capacity to produce antigenic peptides. PSMB8 plays a pivotal role in interferon gamma-induced sensitivity and apoptosis regulation through degradation of the apoptotic inhibitor MCL1. It is also involved in inflammatory response pathways and adipocyte differentiation. The protein localizes to both the cytoplasm and nucleus, reflecting its diverse cellular functions. Recent research has revealed its involvement in generating spliced peptides through ligation of non-contiguous proteasomal cleavage products, expanding our understanding of antigen presentation mechanisms.