Recombinant PSB11 protein (His tag)

Catalog Number	546372
Synonyms	Proteasome subunit beta-5t
Species	Human
Expression System	E. coli
Accession	A5LHX3
Molecular Weight	Predictes a molecular mass of 24.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	50-255
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 50-255 aa (A5LHX3) 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-11 (PSMB11) fragment (residues 50-255) from Homo sapiens, designed for structural and biochemical studies. This 206-amino acid fragment represents a stable, soluble unit ideal for investigating proteasome function and T cell development mechanisms. The proteasome is a multicatalytic proteinase complex that cleaves peptides with specificity for residues like Arg, Phe, Tyr, Leu, and Glu at neutral to slightly basic pH, exhibiting ATP-dependent proteolytic activity. Proteasome subunit beta type-11 (PSMB11) is incorporated in place of PSMB5 or PSMB8, reducing the chymotrypsin-like activity of the proteasome and playing a pivotal role in the development of CD8-positive T cells. It is localized in both the cytoplasm and nucleus, highlighting its involvement in key cellular processes. This recombinant fragment supports research into proteasome dynamics and immune cell regulation.