Recombinant PSMD2 protein (His tag)

Catalog Number	547256
Synonyms	26S proteasome regulatory subunit RPN1; 26S proteasome regulatory subunit S2; 26S proteasome subunit p97; Protein 55.11; Tumor necrosis factor type 1 receptor-associated protein 2
Species	Human
Expression System	E. coli
Accession	Q13200
Molecular Weight	Predictes a molecular mass of 27.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	374-615
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 374-615 aa (Q13200) 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 26S Proteasome Non-ATPase Regulatory Subunit 2 (PSMD2) Fragment (aa 374-615) is a high-quality protein product designed for structural and biochemical studies. This 242-amino acid fragment, derived from the Homo sapiens 26S proteasome regulatory subunit RPN1, represents a stable and soluble unit ideal for investigating proteasome function and ubiquitin-mediated protein degradation pathways. The full-length 26S proteasome non-ATPase regulatory subunit 2 (PSMD2) is an essential component of the 26S proteasome complex, which mediates ATP-dependent degradation of ubiquitinated proteins. This complex maintains cellular protein homeostasis by eliminating misfolded, damaged, or obsolete proteins, thereby regulating critical processes including cell cycle progression, apoptosis, and DNA damage repair. Additionally, PSMD2 binds to the intracellular domain of tumor necrosis factor type 1 receptor (TNFR1), with binding domains located outside the receptor's death domain, suggesting roles in TNF signaling pathways. The selected fragment (aa 374-615) was computationally optimized for stability and solubility, enabling reliable experimental analysis of this important regulatory protein's structural and functional properties.