Recombinant PSD12 protein (His tag)

Catalog Number	541696
Synonyms	26S proteasome regulatory subunit RPN5; 26S proteasome regulatory subunit p55
Species	Human
Expression System	E. coli
Accession	O00232
Molecular Weight	Predictes a molecular mass of 54.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 59 kDa band.

Product Information

Sequence Region	2-456
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 2-456 aa (O00232) 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	Introducing the recombinant human 26S proteasome non-ATPase regulatory subunit 12 (RPN5/p55) fragment (residues 2-456), a high-purity protein designed to encompass the complete PCI functional domain. This product is an essential tool for researchers studying proteasomal regulation, ubiquitin-dependent protein degradation, and cellular homeostasis mechanisms. The full-length 26S proteasome non-ATPase regulatory subunit 12 (PSMD12) is a crucial 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 unnecessary proteins, thereby playing vital roles in critical cellular processes including cell cycle progression, apoptosis, and DNA damage repair. The proteasome's function is fundamental to normal cellular operation and has implications across numerous research areas from basic cell biology to disease mechanisms.