Recombinant RNFT1 protein (His tag)

Catalog Number	542828
Synonyms	Protein PTD016; RING finger and transmembrane domain-containing protein 1
Species	Human
Expression System	E. coli
Accession	Q5M7Z0
Molecular Weight	Predictes a molecular mass of 12.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	344-435
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 344-435 aa (Q5M7Z0) 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 fragment of E3 ubiquitin-protein ligase RNFT1 (EC 2.3.2.27), a key enzyme in the endoplasmic reticulum-associated degradation (ERAD) pathway. This product features a stable, soluble 92-amino acid fragment (residues 344-435), optimized for structural and biochemical studies to advance research in protein quality control and cellular stress response. E3 ubiquitin-protein ligase RNFT1, encoded by the RNFT1 gene in Homo sapiens, functions in the endoplasmic reticulum (ER)-associated degradation (ERAD) pathway. It ubiquitinates misfolded proteins that accumulate in the ER, targeting them for proteasome-mediated degradation, thereby protecting cells from ER stress-induced apoptosis. The full-length protein is localized to the endoplasmic reticulum membrane as a multi-pass membrane protein, underscoring its critical role in maintaining ER homeostasis and cellular survival under stress conditions.