Recombinant RN126 protein (His tag)

Catalog Number	548124
Synonyms	RING finger protein 126
Species	Human
Expression System	E. coli
Accession	Q9BV68
Molecular Weight	Predictes a molecular mass of 12.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	175-273
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 175-273 aa (Q9BV68) 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 E3 ubiquitin-protein ligase RNF126 fragment (residues 175-273) is a high-quality, stable protein product designed for structural and biochemical studies. This 99-amino acid fragment, derived from the human RNF126 protein, offers researchers a soluble and functional unit ideal for investigating ubiquitination mechanisms and protein quality control pathways. RNF126 is a multifunctional E3 ubiquitin-protein ligase that mediates various types of polyubiquitination (Lys-27, Lys-29, Lys-48, and Lys-63 linkages) on diverse substrate proteins. It plays crucial roles in protein quality control as part of the BAG6 complex, targeting mislocalized secretory proteins for proteasomal degradation. Additionally, RNF126 regulates endosomal recycling and degradation of membrane receptors (including EGFR, FLT3, MET, and CXCR4), promotes cell proliferation through CDKN1A/p21 degradation, monoubiquitinates AICDA, and enhances DNA repair by ubiquitinating MRE11 to promote its exonuclease activity. The protein localizes to both the cytoplasm and nucleus, reflecting its diverse cellular functions in protein homeostasis, receptor trafficking, and DNA damage response.