Recombinant RN180 protein (His tag)

Catalog Number	545323
Synonyms	RING finger protein 180; RING-type E3 ubiquitin transferase RNF180
Species	Human
Expression System	E. coli
Accession	Q86T96
Molecular Weight	Predictes a molecular mass of 15.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-124
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 1-124 aa (Q86T96) 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 RNF180 (EC 2.3.2.27), a key regulator of protein degradation pathways. This product comprises a stable, soluble 124-amino acid fragment (residues 1-124), meticulously designed for structural and biochemical studies, enabling researchers to investigate ubiquitination mechanisms with high reliability. RNF180 is a RING-type E3 ubiquitin-protein ligase that catalyzes the polyubiquitination of target proteins such as ZIC2, marking them for degradation via the proteasome pathway. This process is critical for maintaining cellular protein homeostasis and regulating developmental signaling. The full-length protein is localized to the endoplasmic reticulum membrane as a single-pass membrane protein and is also present in the nuclear envelope, underscoring its role in membrane-associated and nuclear ubiquitination events. The provided fragment offers a focused tool to explore the enzymatic and structural properties of RNF180 without domain complexities, supporting advances in understanding ubiquitin-mediated proteolysis.