Recombinant RN183 protein (His tag)

Catalog Number	545657
Species	Human
Expression System	E. coli
Accession	Q96D59
Molecular Weight	Predictes a molecular mass of 15.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	1-120
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 1-120 aa (Q96D59) 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 E3 ubiquitin-protein ligase RNF183 (EC 2.3.2.27) fragment (amino acids 1-120) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment, derived from the N-terminal region, offers a stable and functional unit ideal for investigating ubiquitination mechanisms and apoptosis regulation. E3 ubiquitin-protein ligase RNF183 is a key enzyme in the ubiquitin-proteasome system, catalyzing the attachment of ubiquitin to substrate proteins, which targets them for degradation. It plays a critical role in apoptosis by mediating the polyubiquitination and proteasomal degradation of BCL2L1 in response to prolonged endoplasmic reticulum (ER) stress. Additionally, RNF183 may collaborate with FATE1 to regulate apoptotic signaling by controlling BIK protein levels. The protein is localized to the endoplasmic reticulum membrane as a single-pass type IV membrane protein, with additional presence in the ER, Golgi apparatus (cis-Golgi network membrane), and lysosome membrane, highlighting its involvement in cellular stress and protein quality control pathways.