Recombinant RNF8 protein (His tag)

Catalog Number	544197
Synonyms	hRNF8; RING finger protein 8; RING-type E3 ubiquitin transferase RNF8
Species	Human
Expression System	E. coli
Accession	O76064
Molecular Weight	Predictes a molecular mass of 17.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	1-140
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-140 aa (O76064) 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 hRNF8 (1-140) Fragment is a high-purity, E. coli-expressed protein encompassing the N-terminal 140 amino acids of human E3 ubiquitin-protein ligase RNF8. This fragment includes the complete FHA domain (residues 38-92), making it an ideal tool for studying DNA damage response mechanisms, domain-specific interactions, and ubiquitination signaling pathways in controlled experimental settings. E3 ubiquitin-protein ligase RNF8 is a key regulator in DNA damage response, functioning through dual ubiquitination activities: catalyzing 'Lys-63'-linked ubiquitination of histones H2A and H2AX to recruit DNA repair proteins to double-strand breaks, and mediating 'Lys-48'-linked ubiquitination to degrade target proteins like CHEK2 and JMJD2A. Located primarily in the nucleus, RNF8 is recruited to DNA damage sites following phosphorylation by ATM and plays critical roles in non-homologous end joining, chromatin remodeling, spermatogenesis, and telomere maintenance. The full-length protein's complex involvement in genome stability makes it essential for understanding cancer development and DNA repair mechanisms.