Recombinant RNF5 protein (His tag)

Catalog Number	545781
Synonyms	RING finger protein 5; Ram1 homolog; HsRma1
Species	Human
Expression System	E. coli
Accession	Q99942
Molecular Weight	Predictes a molecular mass of 10.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	2-80
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 2-80 aa (Q99942) 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 RNF5 fragment (residues 2-80), derived from human RNF5, offers a stable and soluble unit ideal for structural studies and biochemical assays. This fragment enables researchers to explore the ubiquitination mechanisms and regulatory functions of RNF5 in a manageable format. E3 ubiquitin-protein ligase RNF5 (RING finger protein 5) is a membrane-bound enzyme that facilitates ubiquitination of various target proteins, playing critical roles in cellular processes such as motility, autophagy, and antiviral responses. It interacts with E2 ubiquitin-conjugating enzymes like UBE2D1 and UBE2N to mediate both 'Lys-48'- and 'Lys-63'-linked polyubiquitination, leading to proteasomal degradation or functional modulation of substrates including PXN/paxillin, STING1, and ATG4B. RNF5 is predominantly localized in the plasma membrane, with additional presence in mitochondrial and endoplasmic reticulum membranes, underscoring its involvement in organelle-specific regulatory pathways.