Recombinant RN128 protein (His tag)

Catalog Number	540841
Synonyms	Gene related to anergy in lymphocytes protein; GRAIL; RING finger protein 128; RING-type E3 ubiquitin transferase RNF128
Species	Human
Expression System	E. coli
Accession	Q8TEB7
Molecular Weight	Predictes a molecular mass of 19.65 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	41-207
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 41-207 aa (Q8TEB7) 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 RNF128 (41-207) Fragment is a high-purity protein product encompassing the essential PA domain (residues 75-183) of E3 ubiquitin-protein ligase RNF128. This fragment serves as an invaluable tool for investigating the ubiquitination mechanisms and domain-specific functions of RNF128, which plays critical roles in immune regulation, cytoskeletal dynamics, and protein homeostasis. RNF128, also known as GRAIL (Gene related to anergy in lymphocytes protein), is a RING-type E3 ubiquitin transferase that catalyzes the formation of 'Lys-27', 'Lys-48', and 'Lys-63'-linked polyubiquitin chains, modulating diverse biological processes. It induces T-cell anergy by inhibiting IL2 and IL4 transcription, regulates cytoskeletal dynamics through ubiquitination of ARPC5 and COR1A, and enhances innate immune responses by promoting TBK1 ubiquitination following viral infection. Additionally, RNF128 targets multiple transmembrane proteins (including CD40L, CD83, and CD151) and signaling components (such as IL3RA and TLR4) for degradation, thereby fine-tuning immune signaling pathways and inflammatory responses. The protein localizes primarily to the cytoplasm, cytoskeleton, perinuclear region, and endomembrane system, functioning as a single-pass membrane protein within the transferrin recycling endosomal pathway and partially associating with endoplasmic reticulum, Golgi, and late endosomal markers.