Recombinant RANB9 protein (His tag)

Catalog Number	545755
Synonyms	RanBP9; BPM-L; BPM90; Ran-binding protein M; RanBPM; RanBP7
Species	Human
Expression System	E. coli
Accession	Q96S59
Molecular Weight	Predictes a molecular mass of 37.85 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	141-461
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 141-461 aa (Q96S59) 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 Ran-binding protein 9 (RanBP9) fragment (residues 141-461), a meticulously engineered protein designed for studying the functional domains of this key scaffolding and adapter protein. This 321-amino acid fragment fully encompasses the B30.2/SPRY, LisH, and CTLH domains, making it an ideal tool for investigating specific intracellular signaling pathways and protein-protein interactions in human cellular systems. Ran-binding protein 9 (RanBP9) serves as a crucial scaffolding and adapter protein in human cells, coupling membrane receptors to intracellular signaling pathways and mediating cell spreading and actin cytoskeleton rearrangement. As a core component of the CTLH E3 ubiquitin-protein ligase complex, it facilitates ubiquitination and proteasomal degradation of transcription factors. The protein enhances HGF-MET signaling through Ras pathway activation, modulates integrin signaling including ITGB2/LFA-1, and regulates steroid receptor transactivation activities. RanBP9 demonstrates dynamic subcellular localization, distributing between cytoplasm, nucleus, and cell membrane, with phosphorylation states influencing its membrane association. The full-length protein also stabilizes TP73 isoforms, inhibits DYRK1A/B kinase activities, and modulates RNA binding capabilities, highlighting its multifaceted role in cellular regulation and signaling networks.