Recombinant RNB3L protein (His tag)

Catalog Number	545339
Species	Human
Expression System	E. coli
Accession	Q86VV4
Molecular Weight	Predictes a molecular mass of 19.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	265-418
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 265-418 aa (Q86VV4) 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 Ran-binding protein 3-like (RANBP3L) fragment (aa 265-418) is a high-purity protein designed to encompass the functional RanBD1 domain. This fragment serves as an essential tool for investigating BMP signaling termination, SMAD nuclear export mechanisms, and mesenchymal stem cell differentiation pathways. Ran-binding protein 3-like (RANBP3L) is a nuclear export factor that plays a critical role in bone morphogenetic protein (BMP) signaling regulation. It specifically recognizes dephosphorylated SMAD1/5/8 proteins and mediates their Ran-dependent nuclear export, thereby terminating BMP signaling. This activity is essential for directing mesenchymal stem cell differentiation, where RANBP3L blocks osteoblast differentiation to promote myogenic lineage commitment. The protein localizes to both the nucleus and cytoplasm, consistent with its shuttling function in SMAD protein transport. The provided fragment containing the RanBD1 domain enables focused study of this specific functional region's role in nuclear export processes.