Recombinant ANKR9 protein (His tag)

Catalog Number	545643
Species	Human
Expression System	E. coli
Accession	Q96BM1
Molecular Weight	Predictes a molecular mass of 35.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	1-317
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-317 aa (Q96BM1) 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 ANKRD9 (Ankyrin repeat domain-containing protein 9) fragment (residues 1-317) from Homo sapiens, designed for studying its role in E3 ubiquitin ligase complexes and GTP biosynthesis regulation. This stable, soluble fragment is ideal for structural and functional analyses. Ankyrin repeat domain-containing protein 9 (ANKRD9) is a substrate receptor subunit of CUL5-based E3 ubiquitin ligase complexes, facilitating ubiquitination and proteasomal degradation of target proteins such as IMPDH2, the rate-limiting enzyme in GTP biosynthesis. Depending on cellular metabolic states, ANKRD9 either promotes IMPDH2 degradation or stabilizes its filament assembly, implicating it in copper homeostasis and cell proliferation. It localizes to cytoplasmic vesicles and the cytosol, forming filamentous structures with IMPDH2 under nutrient-limited conditions, highlighting its dynamic regulatory role in cellular processes.