Recombinant AKTIP protein (His tag)

Catalog Number	545965
Synonyms	Ft1; Fused toes protein homolog
Species	Human
Expression System	E. coli
Accession	Q9H8T0
Molecular Weight	Predictes a molecular mass of 27.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	69-292
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 69-292 aa (Q9H8T0) 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 AKT-interacting protein (Ft1) fragment (amino acids 69-292) from Homo sapiens, encompassing the complete UBC core domain. This high-purity protein fragment serves as an essential research tool for investigating vesicle trafficking regulation, apoptosis modulation, and AKT1 signaling pathways. AKT-interacting protein (AKTIP), also known as Fused toes protein homolog, functions as a component of the FTS/Hook/FHIP complex (FHF complex), which promotes vesicle trafficking and fusion via the homotypic vesicular protein sorting complex. The protein regulates apoptosis by enhancing phosphorylation and activation of AKT1 and increases TNFSF6 release through the AKT1/GSK3B/NFATC1 signaling cascade. Additionally, the FHF complex facilitates the distribution of AP-4 complex to the perinuclear cellular region. AKTIP localizes to the cytoplasm and cell membrane as a peripheral membrane protein, positioning it at critical cellular interfaces for signal transduction and vesicular transport processes.