Recombinant AKAP6 protein (His tag)

Catalog Number	540232
Synonyms	AKAP-6; A-kinase anchor protein 100 kDa; AKAP 100; Protein kinase A-anchoring protein 6; PRKA6; mAKAP
Species	Human
Expression System	E. coli
Accession	Q13023
Molecular Weight	Predictes a molecular mass of 50.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 57 kDa band.

Product Information

Sequence Region	775-1191
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 775-1191 aa (Q13023) 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	This recombinant protein product features a stable and soluble fragment (residues 775-1191) of human A-kinase anchor protein 6 (AKAP-6), also known as mAKAP. This fragment is optimized for structural and biochemical studies, offering researchers a reliable tool to investigate the scaffolding functions of AKAP-6 in protein kinase A signaling complexes. A-kinase anchor protein 6 (AKAP-6) is a critical scaffolding protein that binds to type II regulatory subunits of protein kinase A (PKA), anchoring them to specific intracellular locations such as the nuclear membrane and sarcoplasmic reticulum. In heart muscle, it facilitates the assembly of multiprotein complexes, enabling precise spatial and temporal regulation of PKA signaling. The full-length protein employs multiple targeting signals—including motifs rich in basic and hydrophobic residues, lipid modifications like palmitoylation or myristoylation, and alternatively spliced sequences—to ensure correct subcellular localization, underscoring its role as an adapter in organizing signaling pathways.