Recombinant KANK2 protein (His tag)

Catalog Number	547468
Synonyms	Ankyrin repeat domain-containing protein 25; Matrix-remodeling-associated protein 3; SRC-1-interacting protein; SIP; SRC-interacting protein; SRC1-interacting protein
Species	Human
Expression System	E. coli
Accession	Q63ZY3
Molecular Weight	Predictes a molecular mass of 29.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	590-851
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 590-851 aa (Q63ZY3) 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 KANK2 protein fragment (residues 590-851) from Homo sapiens, designed for structural and biochemical studies. This fragment represents a stable and soluble unit of the KN motif and ankyrin repeat domain-containing protein 2, enabling investigations into its roles in transcription regulation, apoptosis, and cytoskeletal dynamics. The full-length KANK2 protein, also known as Ankyrin repeat domain-containing protein 25 or Matrix-remodeling-associated protein 3, is a multifunctional regulator involved in transcription, apoptosis, and cell adhesion. It sequesters nuclear receptor coactivators (e.g., NCOA1, NCOA2, NCOA3) in the cytoplasm to modulate transcription and retains AIFM1 in mitochondria to inhibit caspase-independent apoptosis, with proteasomal degradation allowing AIFM1 translocation to the nucleus upon pro-apoptotic stimuli. Additionally, KANK2 interacts with ARHGDIA to regulate the Rho signaling pathway, influencing actin stress fiber formation, cell migration (e.g., podocyte movement in kidney development), and cell proliferation. It also negatively regulates vitamin D receptor signaling. The protein localizes to the cytoplasm and mitochondria, underscoring its diverse roles in cellular processes.