Recombinant SKAP protein (His tag)

Catalog Number	548581
Synonyms	SKAP; Kinetochore-localized astrin-binding protein; Kinastrin; Kinetochore-localized astrin/SPAG5-binding protein; TRAF4-associated factor 1
Species	Human
Expression System	E. coli
Accession	Q9Y448
Molecular Weight	Predictes a molecular mass of 18.59 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	171-316
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 171-316 aa (Q9Y448) 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 Small Kinetochore-Associated Protein (SKAP) Fragment (residues 171-316) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment represents a stable domain of SKAP, essential for mitotic spindle function and chromosome segregation, offering researchers a reliable tool to investigate mechanisms of cell division and kinetochore dynamics. The full-length Small Kinetochore-Associated Protein (SKAP), encoded by the KNSTRN gene in Homo sapiens, is a critical component of the mitotic spindle required for faithful chromosome segregation and progression into anaphase. It promotes the metaphase-to-anaphase transition, ensures chromosome alignment, regulates sister chromatid segregation timing, and maintains spindle pole architecture. SKAP functions within the astrin-kinastrin complex to stabilize microtubule-kinetochore attachments, facilitating kinetochore oscillations and microtubule plus-end dynamics during mitosis, which are vital for accurate cell division. Subcellularly, SKAP localizes to the nucleus, kinetochore, spindle poles, and microtubule organizing centers, concentrating at the kinetochore-microtubule interface from prometaphase to anaphase, highlighting its role in linking spindle microtubules to mitotic chromosomes. While it may be involved in UV-induced apoptosis, this requires further validation.