Recombinant CPAP protein (His tag)

Catalog Number	541301
Synonyms	Centromere protein J; CENP-J; Centrosome assembly and centriole elongation protein; LAG-3-associated protein; LYST-interacting protein 1
Species	Human
Expression System	E. coli
Accession	Q9HC77
Molecular Weight	Predictes a molecular mass of 25.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	863-1059
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 863-1059 aa (Q9HC77) 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 Centrosomal P4.1-associated Protein (CPAP/CENP-J) Fragment (residues 863-1059) is a high-purity, stable protein designed for structural and biochemical studies. This 197-amino acid fragment, derived from the full-length protein critical for centriole duplication and microtubule regulation, offers an optimal balance of solubility and functionality for advanced research applications in cell division and centrosome biology. Centrosomal P4.1-associated protein (CPAP), also known as Centromere protein J (CENP-J), is a key regulator of cell division and centrosome function in humans. It plays an essential role in centriole duplication and elongation, while simultaneously inhibiting microtubule nucleation from centrosomes. The protein acts as a microtubule plus-end tracking protein that stabilizes centriolar microtubules and controls their slow processive growth. CPAP is required for STIL-mediated centriole amplification and recruits CEP295 to new-born centrioles during early S phase in a PLK4-dependent manner. It localizes specifically to the cytoplasm, cytoskeleton, microtubule organizing center, and centrosome, particularly concentrating within the proximal lumen of both parental centrioles and procentrioles during centriole biogenesis. The protein may function as a regulator of tubulin release, thereby controlling centriolar-microtubule growth dynamics.