Recombinant PCNT protein (His tag)

Catalog Number	541930
Synonyms	Kendrin; Pericentrin-B
Species	Human
Expression System	E. coli
Accession	O95613
Molecular Weight	Predictes a molecular mass of 28.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	244-470
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 244-470 aa (O95613) 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 Pericentrin (Kendrin/Pericentrin-B) Fragment (aa 244-470) is a 227-amino acid protein fragment designed for structural and biochemical studies. This fragment represents a stable, soluble region of the full-length protein, which is essential for centrosome integrity and microtubule organization, making it an ideal tool for investigating cellular division and cytoskeletal dynamics. Pericentrin, encoded by the PCNT gene in Homo sapiens, is an integral component of the centrosomal pericentriolar material (PCM) and plays a critical role in establishing organized microtubule arrays during mitosis and meiosis. It contributes to microtubule network formation in conjunction with DISC1 and helps prevent premature centrosome splitting in interphase by inhibiting NEK2 kinase activity at the centrosome. The protein is localized exclusively to the cytoplasm, cytoskeleton, and microtubule organizing center (centrosome), where it remains associated even after microtubule depolymerization and colocalizes with DISC1, underscoring its importance in cell division and structural organization.