Recombinant CMAP3 protein (His tag)

Catalog Number	547802
Synonyms	Protein pitchfork
Species	Human
Expression System	E. coli
Accession	Q8TCI5
Molecular Weight	Predictes a molecular mass of 23.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	1-191
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 1-191 aa (Q8TCI5) 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 Ciliary Microtubule-Associated Protein 3 (CIMAP3), also known as Protein Pitchfork, is a high-purity fragment (residues 1-191) designed for structural and biochemical studies. This fragment represents a stable, soluble unit of the protein, ideal for investigating its role in cilia disassembly and cell cycle regulation. Ciliary Microtubule-Associated Protein 3 (CIMAP3) is a human protein essential for primary cilia disassembly, where it facilitates cilia retraction and the liberation and duplication of the basal body/centrosome. It functions by stimulating AURKA activity at the basal body in a cell cycle-dependent manner, as supported by research (PubMed:20643351). The protein localizes to the basal body and ciliary necklace during cilia assembly and disassembly, accumulating in vesicles during S phase and declining in mitosis. It is also found in the cytoplasm, Golgi apparatus, and trans-Golgi network, highlighting its dynamic role in cellular processes.