# Recombinant CEP72 protein (His tag)

| | |
|---|---|
| **Catalog Number** | 548426 |
| **Synonyms** | Cep72 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9P209 |
| **Molecular Weight** | Predictes a molecular mass of 18.70 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band. |

## Product Information

| | |
|---|---|
| **Sequence Region** | 1-152 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >87%, 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 1-152 aa (Q9P209) 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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

| | |
|---|---|
| **Description** | Introducing the recombinant Cep72 (1-152) fragment, a high-purity protein derived from human Centrosomal protein of 72 kDa. This product encompasses the critical LRRCT domain (residues 111-150), offering researchers a precise tool to investigate domain-specific functions in centrosomal recruitment, microtubule nucleation, and spindle formation. Ideal for structural studies, binding assays, and functional analyses in cell division research.<br>Centrosomal protein of 72 kDa (Cep72), encoded by the CEP72 gene in humans, plays a pivotal role in centrosome function and mitotic spindle organization. It recruits essential centrosomal proteins such as KIZ, AKAP9, and gamma-tubulin ring complexes (gamma-TuRCs) to the centrosome, enabling microtubule-nucleation activity and the formation of a focused bipolar spindle. This process is critical for generating proper tension between sister chromatids during cell division. Cep72 also supports centriole duplication and facilitates the centrosomal localization of proteins like CDK5RAP2, CEP152, WDR62, CEP63, and CDK2. Subcellularly, it localizes to the centrosome and centriolar satellites in a microtubule-dependent manner, associating with particles that disperse upon microtubule depolymerization. The full-length protein's functions underscore its importance in ensuring genomic stability and accurate cell cycle progression. |