Recombinant CE162 protein (His tag)

Catalog Number	542847
Synonyms	Cep162; Protein QN1 homolog
Species	Human
Expression System	E. coli
Accession	Q5TB80
Molecular Weight	Predictes a molecular mass of 29.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	1169-1403
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 1169-1403 aa (Q5TB80) 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 Cep162 (1169-1403) Fragment: A high-quality, soluble protein fragment derived from human Centrosomal protein of 162 kDa (Cep162), designed for structural and biochemical studies of ciliogenesis and microtubule interaction mechanisms. The full-length Centrosomal protein of 162 kDa (Cep162) is essential for promoting the assembly of the transition zone in primary cilia. It specifically recognizes and binds axonemal microtubules, localizing to the distal ends of centrioles prior to ciliogenesis, where it facilitates and confines transition zone formation at the cilia base. Cep162 is also required for mediating the association of CEP290 with microtubules. Subcellularly, it resides in the cytoplasm at the cytoskeleton, particularly at the microtubule organizing center, centrosome, and centriole, as well as the spindle during mitosis, and is also found in the nucleus. This protein plays a critical role in cellular processes involving microtubule dynamics and cilia formation, with implications for understanding related cellular functions and disorders.