Recombinant CATAC protein (His tag)

Catalog Number	538390
Synonyms	Coiled-coil domain-containing protein 84
Species	Human
Expression System	E. coli
Accession	Q86UT8
Molecular Weight	Predictes a molecular mass of 21.78 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	1-172
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-172 aa (Q86UT8) 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 CENATAC (Centrosomal AT-AC Splicing Factor) Fragment (aa 1-172) is a high-purity protein designed for structural and functional studies. This 172-amino acid fragment, derived from the coiled-coil domain-containing protein 84, represents a stable and soluble unit ideal for investigating its roles in minor intron splicing and centrosome duplication regulation. CENATAC is a multifunctional protein in Homo sapiens that serves as a component of the minor spliceosome, facilitating splicing of rare minor intron subtypes. It also acts as a critical negative regulator of centrosome duplication by controlling centriole numbers through modulation of SASS6 protein degradation in an acetylation-dependent manner. The protein localizes to the centrosome at the proximal end of the mother centriole, with dynamic cell cycle-dependent accumulation from G1 to metaphase and significant decrease during anaphase. Its activity is regulated through acetylation cycles involving SIRT1 deacetylation in G1 phase and NAT10-mediated acetylation in mitosis, ultimately influencing SASS6 binding to the APC/C E3 ubiquitin-protein ligase complex for proteasomal degradation.