Recombinant CWC22 protein (His tag)

Catalog Number	548299
Synonyms	Nucampholin homolog; fSAPb
Species	Human
Expression System	E. coli
Accession	Q9HCG8
Molecular Weight	Predictes a molecular mass of 33.26 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	133-406
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 133-406 aa (Q9HCG8) 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 CWC22 Fragment (aa 133-406) - A high-purity protein fragment encompassing the essential MIF4G domain of Pre-mRNA-splicing factor CWC22. This carefully designed construct provides researchers with a specialized tool for investigating spliceosome assembly, exon-junction complex formation, and RNA processing mechanisms without interference from other protein regions. Pre-mRNA-splicing factor CWC22 is a crucial nuclear protein concentrated in nuclear speckles that serves as an essential component of the spliceosome. It plays a dual role in both major and minor spliceosome complexes, facilitating the splicing of U12-type introns. Notably, CWC22 promotes exon-junction complex (EJC) assembly by escorting EIF4A3 to the splicing machinery and preventing its non-specific RNA binding. Through this EJC assembly function, CWC22 is fundamentally required for nonsense-mediated mRNA decay, a critical RNA surveillance pathway. The full-length protein localizes to the nucleus with concentration around speckles, where it colocalizes with EJC core proteins at sites of pre-mRNA synthesis and processing.