Recombinant NIPBL protein (His tag)

Catalog Number	545202
Synonyms	Delangin; SCC2 homolog
Species	Human
Expression System	E. coli
Accession	Q6KC79
Molecular Weight	Predictes a molecular mass of 28.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	1169-1400
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 1169-1400 aa (Q6KC79) 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 NIPBL Fragment (1169-1400), derived from the Nipped-B-like protein (Delangin), is a highly stable and soluble protein fragment ideal for structural and biochemical studies. This product supports research into cohesin loading mechanisms and DNA damage response pathways. The full-length Nipped-B-like protein (NIPBL) is essential for loading the cohesin complex onto DNA, facilitating sister chromatid cohesion and DNA repair. It forms a heterodimeric complex with MAU2/SCC4 to mediate cohesin assembly on chromatin and is recruited to DNA damage sites in a CBX3-, RNF8-, and RNF168-dependent manner. Additionally, NIPBL regulates cortical neuron migration by promoting transcription of key genes like SEMA3A and NRP1. It localizes to the nucleus and chromosomes, underscoring its critical roles in genomic stability and neurodevelopment.