Recombinant NU153 protein (His tag)

Catalog Number	532985
Synonyms	153 kDa nucleoporin; Nucleoporin Nup153
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VXE6
Gene ID	32630
Molecular Weight	Predictes a molecular mass of 15.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	906-1038
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 906-1038 aa (Q9VXE6) 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 Drosophila melanogaster Nuclear Pore Complex Protein Nup153 Fragment (906-1038) - A highly stable and soluble 133-amino acid fragment ideal for structural studies and biochemical characterization of nuclear transport mechanisms. Nuclear pore complex protein Nup153 is an essential component of the nuclear pore complex (NPC) that functions as a scaffolding element in the nuclear phase of the NPC. This protein plays critical roles in nuclear import of nuclear localization signal-containing proteins through Importin alpha/Importin beta receptor-dependent mechanisms, including the nuclear import of Mad protein. Beyond its transport functions, Nup153 contributes to chromosomal organization and gene expression regulation by promoting open chromatin formation and binding to nucleoporin-associated regions (NARs) in transcriptionally active genomic regions. The protein exhibits preferential binding to NARs of the male X chromosome and collaborates with Mgtor to localize the male-specific lethal histone acetyltransferase complex, enabling dosage compensation gene transcription. Additionally, Nup153 may participate in double strand break DNA repair. The full-length protein localizes to the nucleoplasmic side of the nuclear pore complex, forming the nuclear basket structure, and also associates with chromatin, chromosomes, and the mitotic spindle during embryonic development.