Recombinant NXF1 protein (His tag)

Catalog Number	531237
Synonyms	Protein small bristles; Protein tip-associating
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9U1H9
Gene ID	43944
Molecular Weight	Predictes a molecular mass of 52.71 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	105-545
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 105-545 aa (Q9U1H9) 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 Nuclear RNA export factor 1 (sbr) fragment (residues 105-545) from Drosophila melanogaster, encompassing the essential RRM and NTF2 domains. This high-purity fragment is optimized for functional studies of mRNA export mechanisms and domain-specific interactions, offering researchers a precise tool to investigate nuclear-cytoplasmic transport processes. Nuclear RNA export factor 1 (sbr) is a critical mediator of mRNA export from the nucleus to the cytoplasm in Drosophila melanogaster, facilitating the majority of cellular mRNA transport. It also supports transposable element silencing by enabling nuclear export of flamenco transcripts for piRNA biogenesis in ovarian follicle cells. The protein localizes dynamically to the nucleoplasm, nuclear envelope, and cytoplasm, shuttling between compartments to fulfill its transport functions. The selected fragment (105-545) strategically includes the complete RRM (RNA recognition motif) and NTF2 (nuclear transport factor 2-like) domains, enabling targeted investigation of RNA binding and nuclear pore interactions without interference from non-essential regions.