Recombinant THOC7 protein (His tag)

Catalog Number	545195
Synonyms	Functional spliceosome-associated protein 24; fSAP24; Ngg1-interacting factor 3-like protein 1-binding protein 1; NIF3L1-binding protein 1; hTREX30
Species	Human
Expression System	E. coli
Accession	Q6I9Y2
Molecular Weight	Predictes a molecular mass of 25.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	2-204
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 2-204 aa (Q6I9Y2) 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 THO complex subunit 7 (THOC7) fragment (amino acids 2-204) from Homo sapiens, a key structural component of the TREX complex involved in mRNA transcription, processing, and nuclear export. This stable, soluble fragment is ideal for structural studies and biochemical analyses of mRNA export mechanisms. THOC7 is a critical subunit of the THO subcomplex within the TREX complex, which couples mRNA transcription, processing, and nuclear export. It specifically binds spliced mRNA and facilitates efficient export of polyadenylated RNA via the TAP/NXF1 pathway, playing a structural role in oligomerizing the THO-DDX39B complex. The TREX complex is recruited to mRNA in a splicing- and cap-dependent manner and is essential for Kaposi's sarcoma-associated herpesvirus (KSHV) mRNA export and virus production. THOC7 localizes to both the nucleus and cytoplasm, with nuclear import dependent on interaction with THOC5, and is found in nuclear speckles, highlighting its role in mRNA maturation and transport.