Recombinant THOC2 protein (His tag)

Catalog Number	545503
Synonyms	Tho2; hTREX120
Species	Human
Expression System	E. coli
Accession	Q8NI27
Molecular Weight	Predictes a molecular mass of 37.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	1-310
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 1-310 aa (Q8NI27) 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 2 (Tho2) fragment (residues 1-310) from Homo sapiens, designed for structural and biochemical studies. This stable, soluble protein fragment supports research into mRNA export mechanisms and transcription-coupled nuclear processes. THO complex subunit 2 (THOC2) is a critical component of the THO subcomplex within the TREX complex, which coordinates mRNA transcription, processing, and nuclear export. It specifically binds spliced mRNA and facilitates efficient export of polyadenylated RNA through interactions with export factors NXF1-NXT1 and DDX39B. The protein localizes to nuclear speckles and the cytoplasm, where it contributes to mRNA release from nuclear domains and Kaposi's sarcoma-associated herpesvirus mRNA export. This recombinant fragment (1-310) represents a structurally stable region ideal for investigating THOC2's molecular functions.