

Product datasheet for RC209500

THOC7 (NM_025075) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: THOC7 (NM_025075) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: THOC7
Synonyms: fSAP24; hTRES30; NIF3L1BP1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC209500 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGAGCCGTGACTGACGACGAAGTTATACGGAAGCGTCTCCTCATTGATGGAGATGGTCTGGAGATG
ATCGGAGAATTAATCTGCTAGTGAAGAGTTTCATTAATGGTCAACTCTGGGTCCAGGAAGAGGGATA
TAGCCAGTACCAACGTATGCTGAGCACGCTGTCTCAATGTGAATTTCAATGGGCAAACTTTACTAGTA
TATGATATGAATCTCAGAGAAAATGAAAATTTGAAAAATTTACAAGGAAATAGAATGTAGCATAGCTG
GAGCACATGAAAAATTGCTGAGTGCAAAAAGCAAATTTCAAGCAAAACGAATACGAAAAATCGCCA
AGAATATGATGCTTTGGCAAAAGTGATTACAGCACCATCCAGACAGGCATGAGACATTAAAGGAACTAGAG
GCTCTGGGAAAAGAAATTAGGCATCTTTACACATTAAGAAAAGTGTGAAAGATAAGCTGGAATTGAGAC
GGAAACAGTTTCATGTTCTTCTTAGTACCATCCATGAACTTCAGCAAACATTGGAAAATGATGAAAACT
CTCAGAGGTAGAAGAAGCTCAGGAAGCAAGCATGGAAACAGATCCTAAGCCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209500 protein sequence
Red=Cloning site Green=Tags(s)

MGAVTDDDEVIRKRLIDGDGAGDDRRINLLVKSFIKWCNSGSQEEGYSQYQRMLSTLSQCEFSMGKTLV
YDMNLREMYEYIYKEIECSIAGAHEKIAECKQILQAKRIRKNRQYDALAKVIQHHPDRHETLKELE
ALGKELEHLSHIKESVEDKLELRRKQFHVLLSTIHELQQTLENDEKLESEVEEAQEASMETDPKP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6357_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_025075

ORF Size: 612 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_025075.4](#)

RefSeq Size: 1027 bp

RefSeq ORF: 615 bp

Locus ID: 80145

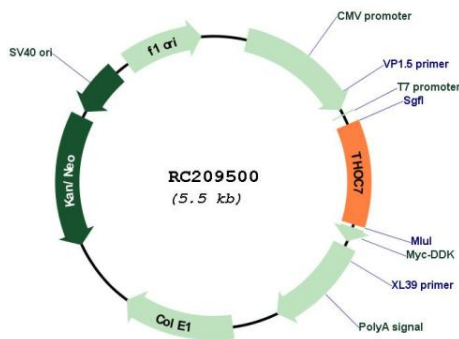
UniProt ID: [Q6I9Y2](#)

Cytogenetics: 3p14.1

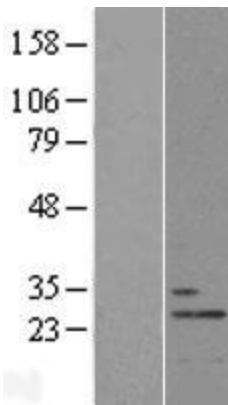
MW: 23.7 kDa

Gene Summary: Required for efficient export of polyadenylated RNA. Acts as component of the THO subcomplex of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and which specifically associates with spliced mRNA and not with unspliced pre-mRNA. TREX is recruited to spliced mRNAs by a transcription-independent mechanism, binds to mRNA upstream of the exon-junction complex (EJC) and is recruited in a splicing- and cap-dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export to the cytoplasm via the TAP/NFX1 pathway.[UniProtKB/Swiss-Prot Function]

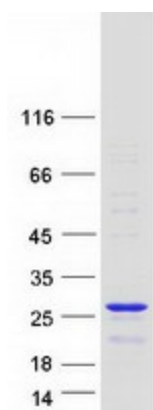
Product images:



Circular map for RC209500



Western blot validation of overexpression lysate (Cat# [LY410901]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209500 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified THOC7 protein (Cat# [TP309500]). The protein was produced from HEK293T cells transfected with THOC7 cDNA clone (Cat# RC209500) using MegaTran 2.0 (Cat# [TT210002]).