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Product datasheet for RC213773

THOC5 (NM_001002877) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	THOC5 (NM_001002877) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	THOC5
Synonyms:	C22orf19; Fmip; fSAP79; PK1.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213773 representing NM_001002877
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCATCAGAATCGAGCAAAAAACGGAAGCCCAAAGTGATCCGAAGCGATGGAGCCCCAGCTGAAGGAA
AGCGGAATCGATCTGACACCGAGCAGGAAGGTAAATACTACAGTGAGGAGGCCGAGGTGGATCTGCGGGA
CCCTGGCAGAGACTATGAGTTATACAAGTACACCTGCCAGGAGCTACAGAGGCTGATGGCTGAGATCCAA
GACCTGAAGAGCAGGGGTGGCAAGGATGTGGCAATAGAAATAGAAGAACGGAGGATCCAGAGCTGTGTGC
ATTTCATGACTCTAAAGAAGCTTAACCGATTAGCCCACATCAGGTTGAAGAAAGGAAGAGATCAGACCCA
CGAGGCTAAGCAGAAAGTAGATGCCTATCATCTGCAGCTCCAGAACCTGTTGTATGAGGTGATGCACCTA
CAGAAGGAGATCACCAAATGTTTGGAGTTTAAGTCAAAGCATGAAGAAATTGATCTGGTCAGTTTAGAGG
AGTTTTATAAGGAGGCTCCACCAGATATCAGCAAGGCCGAAGTCACCATGGGAGACCCTCACCAGCAAAC
ACTGGCACGTCTGGACTGGGAGCTGGAGCAGCGGAAAAGGCTGGCAGAGAAGTACCGAGAGTGCCTATCT
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ACAGCATCATGCAGGCTTCCCTTCCGGTGCAGGAGTACCTGTTTATGCCATTCGACCAGGCTCACAAGCA
GTATGAGACAGCCAGACACCTGCCGCCTCCCCTCTATGTCCTCTTTGTTCAGGCCACTGCGTATGGGCAG
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CAGAGGACTCCCAAGATGACGAGAGTGACTCAGATGCCGAGGAGGAGCAGACTACGAAGCGCCGGAGACC
CACACTGGGGGTTCAGTTGGACGACAAACGCAAGGAGATGCTGAAGAGGCACCCACTGTCTGTCATGCTC
GACCTGAAGTGCAAAGATGACAGTGTGCTTCACCTGACTTTCTACTACCTCATGAACCTCAACATCATGA
CAGTAAAAGCCAAAGTGACAACTGCCATGGAGCTGATCACCCCCATCAGTGCAGGTGACTTGCTGTCTCC
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AAACAGTTTGCATCCCTAGAACATGGCATTGTGCCAGTTACCAGTGATTGCCAGTACCTCTTCCCTGCCA
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GCCAAACTGCAGGCCGCTGTGGTGTTGAACCCTGGCTACTCCTCCATCCCACCTGTTTTCCAGCTCTGTT
TGAACTGGAAAGGGGAGAAAACCAACAGCAACGATGACAACATTCGGGCCATGGAGGGCGAAGTCAATGT
GTGCTACAAGGAGCTGTGTGGCCCTTGGCCCAGCCACCAGCTGTTGACCAACCAGCTGCAGCGGCTGTGT
GTGCTGCTGGATGTTTACCTGGAGACCGAGAGCCATGACGACAGTGTGGAGGGGCCCAAGGAATTTCCCC
AGGAGAAGATGTGTCTGCGGCTCTTCAGGGGTCCTAGCAGGATGAAGCCATTTAAATACAACCATCCTCA
GGGATTCTTCAGCCATCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213773 representing NM_001002877
Red=Cloning site Green=Tags(s)

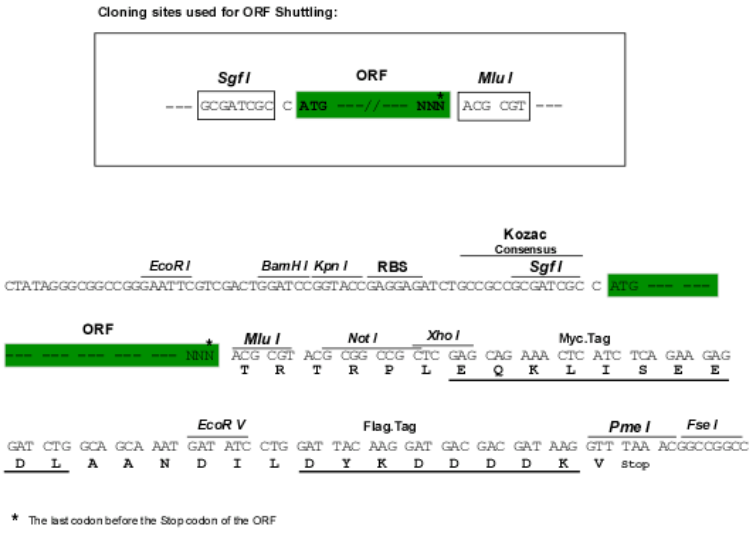
MSSESSKKRKPKVIRSDGAPAEGKRNRSDTEQEGKYYSEEAEVDLRDPGRDYELYKYTCQELQRLMAEIQ
DLKSRGGKDVAIEIEERRIQSCVHFMTLKKLNRLAHIRLKKGRDQTHEAKQKVDAYHLQLQNLLYEVMHL
QKEITKCLEFKSKHEEIDLVSLEEFYKEAPPDISKAEVTMGDPHQQTLARLDWELEQRKRLAEKYRECLS
NKEKILKEIEVKKEYLSSLQPRLNSIMQASLPVQEYLFMPFDQAHKQYETARHLPPPLYVLFVQATAYGQ
ACDKTLSVAIEGSVDEAKALFKPPEDSQDDESDSDAEEEQTTKRRRPTLGVQLDDKRKEMLKRHPLSVML
DLKCKDDSVLHLTFYYLMNLNIMTVKAKVTTAMELITPISAGDLLSPDSVLSCLYPGDHGKKTPNPANQY
QFDKVGILTLSDYVLELGHPYLWVQKLGGLHFPKEQPQQTVIADHSLSASHMETTMKLLKTRVQSRLALH
KQFASLEHGIVPVTSDCQYLFPAKVVSRLVKWVTVAHEDYMELHFTKDIVDAGLAGDTNLYYMALIERGT
AKLQAAVVLNPGYSSIPPVFQLCLNWKGEKTNSNDDNIRAMEGEVNVCYKELCGPWPSHQLLTNQLQRLC
VLLDVYLETESHDDSVEGPKEFPQEKMCLRLFRGPSRMKPFKYNHPQGFFSHR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8104_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001002877

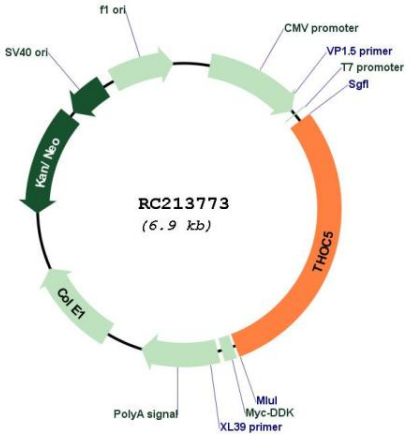
ORF Size: 2049 bp

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001002877.2
RefSeq Size:	2563 bp
RefSeq ORF:	2052 bp
Locus ID:	8563
UniProt ID:	Q13769
Cytogenetics:	22q12.2
MW:	78.5 kDa
Gene Summary:	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. The TREX complex is essential for the export of Kaposi's sarcoma-associated herpesvirus (KSHV) intronless mRNAs and infectious virus production. THOC5 in conjunction with ALYREF/THOC4 functions in NXF1-NXT1 mediated nuclear export of HSP70 mRNA; both proteins enhance the RNA binding activity of NXF1 and are required for NXF1 localization to the nuclear rim. Involved in transcription elongation and genome stability. Involved in alternative polyadenylation site choice by recruiting CPSF6 to 5' region of target genes; probably mediates association of the TREX and CFIm complexes.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC213773