

## Product datasheet for **SC320623**

### THOC5 (NM\_001002878) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	THOC5 (NM_001002878) Human Untagged Clone
Tag:	Tag Free
Symbol:	THOC5
Synonyms:	C22orf19; Fmip; fSAP79; PK1.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_001002878.1  
 GTTCTTGGAGCTGTGAGGAGGAACAACCATGTCATCAGAATCGAGCAAAAAACGGAAGCC  
 CAAAGTGATCCGAAGCGATGGAGCCCCAGCTGAAGGAAAGCGGAATCGATCTGACACCGA  
 GCAGGAAGGTAATACTACAGTGAAGGAGCCGAGGTGGATCTGCCGGACCTGGCAGAGA  
 CTATGAGTTATAACAAGTACACCTGCCAGGAGCTACAGAGGCTGATGGCTGAGATCCAAGA  
 CCTGAAGAGCAGGGGTGGCAAGGATGTGGCAATAGAAATAGAAGAACGGAGGATCCAGAG  
 CTGTGTGCATTTTCATGACTCTAAAGAAGCTTAACCGATTAGCCACATCAGGTTGAAGAA  
 AGGAAGAGATCAGACCCACGAGGCTAAGCAGAAAGTAGATGCCTATCATCTGCAGCTCCA  
 GAACCTGTTGATGAGGTGATGCACCTACAGAAGGAGATCACCAATGTTTGGAGTTTAA  
 GTCAAAGCATGAAGAAATTGATCTGGTCAGTTTAGAGGAGTTTTATAAGGAGGCTCCACC  
 AGATATCAGCAAGGCCGAAGTCACCATGGGAGACCCTCACCAGCAAACTGGCACGCTCT  
 GGACTGGGAGCTGGAGCAGCGAAAAGGCTGGCAGAGAAGTACCGAGAGTGCCTATCTAA  
 CAAGGAGAAGATTCTCAAGGAGATTGAGGTGAAGAAGGAGTACCTGAGCAGCCTCCAGCC  
 CCGCCTCAACAGCATCATGCAGGCTTCCCTTCCGGTGCAGGAGTACCTGTTTATGCCATT  
 CGACCAGGCTCACAAGCAGTATGAGACAGCCAGACACCTGCCGCCTCCCCTCTATGTCCT  
 CTTTGTTCAGGCCACTGGGTATGGGCAGGCCTGTGATAAGACGTTATCTGTGGCAATCGA  
 AGGCAGTGTGGATGAAGCCAAGGCTCTGTTCAAACCTCCAGAGGACTCCCAAGATGACGA  
 GAGTGACTCAGATGCCGAGGAGGAGCAGACTACGAAGCGCCGGAGACCCACACTGGGGGT  
 TCAGTTGGACGACAAACGCAAGGAGATGCTGAAGAGGCACCCACTGTCTGTATGCTCGA  
 CCTGAAGTGCAAAGATGACAGTGTGCTTACCTGACTTTTCTACTACCTCATGAACCTCAA  
 CATCATGACAGTAAAAGCCAAAGTGACAACCTGCCATGGAGCTGATCACCCCATCAGTGC  
 AGGTGACTTGTCTCTCCTGACTCAGTCCTGAGTTGCTTGTATCCTGGGGATCATGGAAA  
 GAAAATCCGAATCCAGCCAATCAGTATCAGTTTGATAAAGTTGGCATCCTGACTTTGAG  
 CGACTATGTACTTGGAGTAGGTACCCCTATTTGTGGGTGCAGAAGCTGGGTGGCCTCCA  
 CTTCCCAAAGAGCAGCCCCAGCAAACAGTGATTGCTGACCACTCGCTGAGCGCCAGCCA  
 CATGGAGACCACCATGAAACTTCTGAAGACCAGGGTGCAGTCCCCTGGCCCTCCACAA  
 ACAGTTTGCATCCCTAGAACATGGCATTGTGCCAGTTACCAGTATTGCCAGTACCTCTT  
 CCCTGCCAAGGTTGTCTCTCGCCTGGTGAATGGGTGACAATTGCCCATGAGGATTACAT  
 GGAGCTGCACTTACCAAAGACATTGTGGATGCGGGACTGGCTGGGGACACCAATCTCTA  
 CTACATGGCGCTCATCGAAAGGGGCACAGCCAACTGCAGGCCGCTGTGGTGTGAAACC  
 TGGCTACTCTCCATCCCACCTATTTCCAGCTCTGTTTGAAGTGGAAAGGGGAGAAAAC  
 CAACAGCAACGATGACAACATTCGGGCCATGGAGGGCGAAGTCAATGTGTGCTACAAAGGA  
 GCTGTGTGGCCCTTGGCCAGCCACCAGCTGTTGACCAACCAGCTGCAGCGGCTGTGTGT  
 GCTGCTGGATGTTTACCTGGAGACCAGAGCCATGACGACAGTGTGGAGGGGCCAAAGGA  
 ATTTCCCAGGAGAAGATGTGTCTGCGGCTCTTCAGGGTCTTAGCAGGATGAAGCCATT  
 TAAATAACAACCATCCTCAGGGATTCTTCAGCCATCGCTGATCTCCCGCGCAGACCCTGT  
 TTCCCCAAGGCCTCACCTGAGCACTGGGCTTCTGCTTCTGCTCTGGCCACATGTGA  
 CTCTTGATTTCTCAAAGACACCAGCCAATTAAGGCGTCACTGAAAAAAAAAAAAA  
 AAAAAAAAAA

- Restriction Sites:** Please inquire
- ACCN:** NM\_001002878
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001002878.1</a></u> , <u><a href="#">NP_001002878.1</a></u>
<b>RefSeq Size:</b>	2694 bp
<b>RefSeq ORF:</b>	2052 bp
<b>Locus ID:</b>	8563
<b>UniProt ID:</b>	<u><a href="#">Q13769</a></u>
<b>Cytogenetics:</b>	22q12.2
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript. All four variants encode the same protein.</p>