

Product datasheet for SC100424

TTI1 (NM_014657) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TTI1 (NM_014657) Human Untagged Clone
Tag:	Tag Free
Symbol:	TTI1
Synonyms:	KIAA0406; smg-10
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC100424 sequence for NM_014657 edited (data generated by NextGen Sequencing)

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ATGGCAGTTTTTGATACTCTGAGGAGGCCTTTGGTGTCTTACGTCCAGTCTGTGTTTCAG
CTCACAAGAGACCCAGACAGTGGAGAATGTGGAGCATCTGCAGACACGACTACAAGCTGTG
AGTGACAGTGGCCCTTCAGGAACCTCAGCAGTACATCCTCTTCCCTCTGCGATTTACCCTG
AAGACCCAGGTCCAAAAGAGAGCGTTTATCCAAAGTGTGGTGAATGCCTCACATTT
GTCCTTTCTTCAACATGTGTGAAAGAACAGGAGCTTCTCCAGGAACCTTTTTCAGAACTC
TCTGCTTGTCTGTATTCACCCAGCTCCAAAACCTGCGGCTGTGTCGAGGAGTTGAAA
TTGGCTGTGATCCAGGGACTTAGCACATTAATGCACTCAGCTTATGGGGACATCATTCTG
ACTTTTTATGAGCCCTCCATTCTGCCACGTTTAGGATTTGCTGTATCTTTACTGTTAGGC
CTTGCAGAACAGGAGAAAATCAAAGCAAATTAATAATGCTGCCTTAAAATGTTTACAGTT
CTACTCTTGCAGTGTGATTGTGACAGGACATCCAAGGTCATTGGATGAACCTGAACAAAAG
CAGCTGGGGGATTTGTTTGCCTCTTTTTACCTGGAATCTCAACTGCACTGACCAGGCTT
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AAGACAGTGGAGCTTCAATATGGCTGATGAACAGCTCAAAAAGATCTCAAAGGTCCAAGCA
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AAAAAGACTGGCGACAAGTTGACTATCCTTATTAATAAGATAATTGAGTGTGTTTCTGTT
CACCCACACTGGAAGGTGAGACTGGAACGGTGAAGTGTGAGGACCTCTTTTGAAG
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CAAAAAGTAGTGGTGGGCAACAAAGCCCTCGCTGACATCTTGTGCAAAAGCCTGCATTCC
CTTGCCACATCTTCTCGCCTAATGAACTCCCAAGATGACCAGGGCAAATTTCTACT
CTTTCCTGTTACTTGGTTATCTGAAACTCTGGGCCCAAAAATAAACTTTGTCTCAAC
TCTGTGGCCCATCTCCAGCGCTTTCCAAAGCACTCATCCAAGTTCTAGAGCTAGACGTG
GCTGACATCAAGATTGTTGAGGAACGGCGTTGAACTCTGATGATCTGAATGCTTCTCCA
AAGACCTCAGCCACACAGCCTTGAACCGCATCCAGAGGAGATATTTCCGCTTCTCACT
GATGAGAGAATCTTCATGCTCTTGGAGCAGGTTTGTGAGTACTTGGTTATTATGGGAAT

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CTTTATTTGCTTGTGGATCACTTTATGGAACCTTACCATCAATCTGTGGTTTACCGGAAG
CAAGCTGCCATGATCCTTAATGAACTGGTTACAGGGGCTGCTGGGCTGGAGGTTGAGGAT
CTTCACGAAAAACATATTTAAACAAACCCAGAAGAACTGAGAGAGATTGTGACATCTATA
CTTGAAGAATACACAAGTCAAGAAAATTGGTATTTGGTTACCTGTCTTGAACCTGAGGAA
ATGGGAGAGGAGCTGATGATGGAGCACCCAGGCCTCCAAGCCATCACGTCTGGTGAACAC
ACCTGCCAAGTTACATCTTTTCTAGCCTTCTCAAAGCCAAGTCCCCTACTTTGCTCCATG
AACAGTAACATCTGGCAAATATGCATTCAGTTGGAAGGAATTGGCCAGTTTGCATATGCA
CTAGGAAAAGACTTCTGTTTGTCTTGTGATGTCAGCCCTTTATCCAGTACTGGAGAAGGCT
GGAGACCAAACCTACTCATTAGTCAGGTGGCTACCAGCACCATGATGGACGTTTGCCTG
GCTTGTGGCTACGACTCCCTGCAGCACCTGATCAATCAAATTCAGACTATTTAGTGAAT
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GTGAAATTACAAGAGGCTGCCAGGAGCTTCTCCTCCACTTGATGAAGGTGGACCCAGAC
TCCACCTGGTCTCCTGAACGAGCTTTACTGCCCGTGCAGTTCACACCTCCCCACCCC
AGCCTCCACCCTGTGCAGCTGCACGGGCCAGCGGGCAGCAGAACCCTACACGACCAAC
GTGCTCCAGCTGCTCAAGGAGCTGCAGTGA
    
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Clone variation with respect to NM_014657.1

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_014657 unedited
GGGTTGCAACATTTGTATACGACTCATATAGGCGGCCGCGAAATTCGCACGAGGAGAAAAG
CTGGAAGACGAGCCTGCAGGATGTTTCTCAATGAGGGGAAGGCTGCTGCACAATGGCAG
TTTTTGATACTCCTGAGGAGCCTTTGGTGTCTTACGTCCAGTCTGTGTTTCAGCTCACAA
AGACCCAGACAGTGGAGAATGTGGAGCATCTGCAGACACGACTACAAGCTGTGAGTGACA
GTGCCCTTCAGGAACTTCAGCAGTACATCCTTCCCTCTGCGATTTACCCTGAAGACCC
CAGGTCCCAAAAGAGAGCGTTTGTATCCAAAGTGTGGTGAATGCCTCACATTTGCTCTTT
CTTCAACATGTGTGAAAGAACAGGAGCTTCTCCAGGAACTCTTTTCAGAACTCTCTGCTT
GTCTGTATTCACCAGCTCCCAAAAACCTGCGGCTGTGTCCGAGGAGTTGAAATTTGGCTG
TGATCCAGGGACTTAGCACATTAATGCACTCAGCTTATGGGGACATCATTCTGACTTTTT
ATGAGCCCTCCATTCTGCCACGTTTAGGATTTGCTGTATCTTTACTGTTAGGCCTTGCA
AACAGGAGAAAATCAAAGCAAATTTAAATTTGCTGCCTTAAATGTTTACAGGTTCTACTCT
TGCAGTGTGATTGTGAGGACCATCCAAGTTCATTGGATGAACTTGAACAAAAGCAGCTGG
GGGATTTGTTGCTCTTTTACCTGGAATCTCAACTGCACTGACCANGCTTATCACANG
AGACTTNTAACAAGGTACAGCATTGTCGTATCTTCCCTAAGATCTTTTACAAGCAGTGA
GCTTCATTATGGCTGATGAACAGCTCAAAGGATCTCCAAGTCCAAGCAAAACTGCAGN
TGAGCACAGAG
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_014657 unedited TGACCGCGCCGCTTTTAGAGTCGAGTTTTTTTTTTTTTTTTTTTACTTTTCATCCAAA AGTGTCTTTATTTCCGTTTGTTCCTCCAAAGACAGGTTAGGTAAAACAAATTAGTCCATC TCATTATTTGAAGACAGGGAGGTGTATGCAGATGGAGGGGAAGTACCTCTTGTGTGTGT GTGTGTGTGGCCTGTGAGGGAGCTGGGGCTATAGAGATGGTAGGCTAAGGGGTAAACCC TTAGAGCCACCAGACAATGTCACCTTGACAACACAAGGTATGAAACATAAATAATAGTCAG CTACTTTCCTTCAATCCATTTCTAAGCAGTTGTGTGATCGATCAATTTATAAATCGATTG GCTAACTAATTCACCTTCTCTGCTGCCCGCTGCCACCGCCTATGGCCGGGTGGGGTCAGC CCAGCTTCTGGCTGGCAGTACGGGAGGGATCGGTGGCCTCTGTGGTGGGGGAGCAGGGTC ACTGCAGCTCCTTGAGCAGCTGGAGCCAGTTGGTCTGTAGGGTTCTGCTGCCCGCTG GCCCGTGCAGCTGCACAGGGTGGAGGCTGGCGTGGGGAGGTGTGAAGTGTACGGGGCAG TAAAGCTCGTTCATGAGGAACACGCGGAGTCTGGCTCCACTTCATCAAGTGGAGGAAGA CCCTCCTGCCAGCCCTCTGTATTTTTACGGCCTGTTTGACCCTGAGGTAATCAAGCAG GCCTCCCCACTTTATTCAGGTCACCTCCCCTAAGTCCAGCCTTTTCAAGACGGGGCCC AGGCCCTGCAGGAATCCAGCTGCACCTTGAGGCCACGGTCGACTAACCGCCAACCTT GCACTTTGGGGCCCGGGGACTCAGGACATTATCTTGTACGACATTTTTCCCAAGTTG TCAAAAGTACCAATTTGTTTCAGGGCCCTAAATCGGAAACAAGCTCACTGGGGGCGACT TGCC
Restriction Sites:	NotI-NotI
ACCN:	NM_014657
Insert Size:	4000 bp
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).
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:	<ol style="list-style-type: none"> 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:	<u>NM_014657.1</u> , <u>NP_055472.1</u>
RefSeq Size:	3931 bp
RefSeq ORF:	3270 bp
Locus ID:	9675
UniProt ID:	<u>O43156</u>
Cytogenetics:	20q11.23

Gene Summary:

Regulator of the DNA damage response (DDR). Part of the TTT complex that is required to stabilize protein levels of the phosphatidylinositol 3-kinase-related protein kinase (PIKK) family proteins. The TTT complex is involved in the cellular resistance to DNA damage stresses, like ionizing radiation (IR), ultraviolet (UV) and mitomycin C (MMC). Together with the TTT complex and HSP90 may participate in the proper folding of newly synthesized PIKKs. Promotes assembly, stabilizes and maintains the activity of mTORC1 and mTORC2 complexes, which regulate cell growth and survival in response to nutrient and hormonal signals.

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same isoform.