

Product datasheet for RC201622

TTII (NM_014657) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	TTII
Synonyms:	KIAA0406; smg-10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC201622 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGTTTTGTACTCCTGAGGAGGCCTTTGGTGTCTTACGTCCAGTCTGTGTTTCTGCTCACAAGA
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ACTTCAGCAGTACATCTCTCCCTCTGCGATTACCTGAAGACCCAGGTCCCAAAGAGAGCGTTTG
ATCCAAAGTGTGGTGAATGCCTCACATTTGCTCTTTCTTCAACATGTGTGAAGAAGCAGGAGCTTCTCC
AGGAATCTTTTCAAGACTCTCTGCTGTCTGTATTACCCAGCTCCCAAAACCTGCGGCTGTGTCCGA
GGAGTTGAAATTGGCTGTGATCCAGGACTTAGCACATTAATGCACTCAGCTTATGGGGACATCATTCTG
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CCTGGAATCTCAACTGCACTGACCAGGCTTATCACAGGAGACTTTAAACAAGGTACAGCATTGTCGTAT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201622 protein sequence
Red=Cloning site Green=Tags(s)

MAVFDTPPEAFGLRPVQVQLTKTQTVENVEHLQTRLQAVSDSALQELQQYILFPLRFTLTKTPGPKRERL
IQSVVECLTFVLSSTCVKEQELLQELFSEL SACL YSPSSQKPAAVSEELKLAIVQGLSTLMHSAYGDIIL
TFYEPSILPRLGFAVSLLLGLAEQEKSKQIKIAALKCLQVLLQLQDCQDHPRLDELEQKQLGDLFASFL
PGISTALTRLITGDFKQHSIVVSSKIF YKTVSFIMADEQLKRISKVQAKPAVEHRVAELM VYREADWV
KKTGDKLTIILIKKIIIECVSVHPHWKVRLELVLEDLLKCSQSLVECAGPLLKALVGLVNDESPEIQAQ
CNKVLRFHADFQKVVVGKALADILSESLHSLATSLPRLMNSQDDQKGFSTLSLLGYLKLLGPKINFLN
SVAHLQRLSKALIQVLELDVADIKIVEERRWNSDDLNASPKTSATQPNWRIQRRYFRFTDERIFMLLRQ
VCQLLGYGNLYLLVDHFMELYHQS VVYRKQAAMILNELVTGAAGLEVDELHEKHIKTNPEELREIVTSI
LEEYTSQENWYLVTCLETEEMGEELMMEHPGLQAITSGEHTCQVTSFLAFSKPSPTICSMNSNIWQICIQ
LEGIGQFAYALGKDFCLLLMSALYPVLEKAGDQTLISQVATSTMMDVCRACGYDSLQHLINQNSDYLVN
GISLNLRLHALHPHTPKVLEVMRLNSDANLLPLVADVVDVLATLDQFYDKRAASFVSVLHALMAALAQW
FPDGTNLGHLQEQLGEEGSHLNQRPAALEKSTTTAEDIEQFLLNYLKEKDVADGNVSDFDNEEEQSV
PKVDENDTRPDVEPLPLQIQIAMDVMERICIHLSDKNLQIRLKVLDVLDLCVVVLQSHKNQLLPLAHQA
WPSLVHRLTRDAPLAVLRAFKVLRITLGSKCGDFLRSRCKDVLPLAGSLVTQAPI SARAGPVYSHTLAF
KLQLAVLQGLGPLCERLDLGEDLNKVADACL IYLSVKQPVKLQEAARSVFLHLMKVDPDSTWFLLNEL
YCPVQFTPPHPSLHPVQLHGASGQQNPYTTNVLLQLLKELQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6141_h07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_014657

ORF Size: 3267 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_014657.3

RefSeq Size: 3931 bp

RefSeq ORF: 3270 bp

Locus ID: 9675

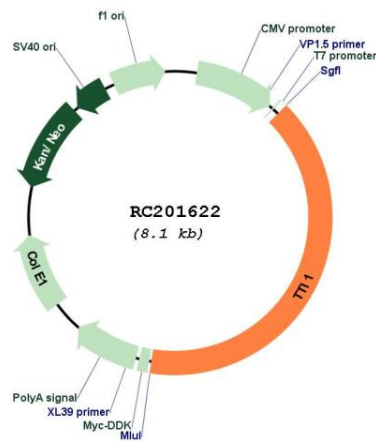
UniProt ID: O43156

Cytogenetics: 20q11.23

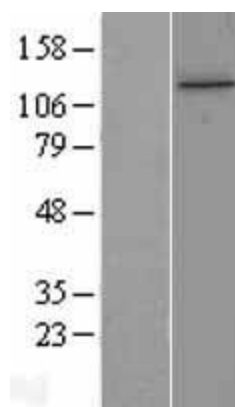
MW: 122.1 kDa

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]

Product images:



Circular map for RC201622



Western blot validation of overexpression lysate (Cat# [LY402361]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201622 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).