

Product datasheet for **SC318594**

TTC21B (NM_024753) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TTC21B (NM_024753) Human Untagged Clone
Tag:	Tag Free
Symbol:	TTC21B
Synonyms:	ATD4; FAP60; FLA17; IFT139; IFT139B; JBTS11; Nbla10696; NPHP12; SRTD4; THM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC318594 representing NM_024753 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACTCGCAGGAATTGAAGACTTTGATTAATTACTATTGTCAAGAGAGATATTTCCATCATGTATTAC
TGGTTGCCAGTGAAGGAATTAAGAGGTATGGAAGTATCCAGTCTTCAGGTTTTATCATGCCATGCGCAC
ATTAATGGAAGGTAAACTCAAGAAGCTCTTCGAGAATTTGAGGCTATTAATAAACAAGATGTATCA
CTTTGTTCTCTACTTGCCTGATATATGCCATAAAATGAGTCTTAATCCAGATAGAGAAGCTATTCTGG
AATCAGATGCCAGAGTGAAGGAACAACGTAAGGAGCTGGAGAGAAAGCCTTATACCATGCAGGCTTATT
TTTATGGCACATTGGTCGCCATGATAAAGCAAGGGAATATATTGACAGAATGATCAAAATATCAGATGGT
AGTAAACAGGGACACGTTTTGAAAGCATGGCTTGATATTACAAGAGGAAAAGAGCCTTACTACTAAAAAG
CACTGAAGTATTTGAAGAGGGACTCCAAGATGGGAATGATACTTTTGCTCTGCTGGGTAAGGCACAATG
CCTTGAGATGCGCCAGAATTATTCAGGTGCCCTGGAGACTATGAACCAGATAATCGTGAATTTCCGAGC
TTCCTTCTGCTTTTGTAAAGAAAATGAAATTACAAGTACTGCTGAGGATTGGGACCAGACAGTTGAGA
CAGCACAAGGTTGCTGCTCCAAGATAGCCAAAATGTGGAAGCACTGAGAATGCAGGCACTCTACTATGT
GTGTAGAGAGGGGGATATAGAGAAGGCTCCACCAAGCTGGAAAACCTGGGAAATGCATTGGATGCCATG
GAACCACAGAATGCTCACTTTTCTATAACATTCACTCGCTCAGCAGAATTTGGGACGTAGTCAAC
TTATTCTTCAAAAATTCAAACGTTACTTGAGAGAGCTTTTAGTTTAAACCCTCAGCAATCAGAATTTGC
TACAGAATTTGGATACCAATGATTTTACAAGGAAGAGTTAAAGAGGCACTGAAGTGGTATAAGACCGCC
ATGACACTTGATGAGACTAGTGTGCTGCCCTAGTTGGATTTATCCAATGTCAGTTGATAGAAGGGCAAT
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GATGTCCTGGCACTCACTTTTACAATTAGAAGGTTTGCCTCTTGGCATAACAGTATTTTAAAAGCTAA
ATCCTGATTTCTGTTAGAAATGTTATGGAGTATCTGAGCTTCTGTCCAATGCAGCCTGCAAGTCTCGG
GCAACCTTTTGTCCATTTCTCAGGCGTTGCATCTCAGTCTGGAGACTGTAGTAAGAAGTTCAGGT



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CTTCTGCAAACAGTCTTCTAATAGCAAAAGTGAATATTTGTCAGGTGATATTGAAGCAGCTTTCAATA
 ACCTTCAGCACTGCTTAGAACACAATCCCTCTTATGCTGATGCTCATCTGCTGCTAGCTCAGGTTTACTT
 GTCTCAAGAAAAAGTCAAATTGTGTTCTCAGTCTCTTGAACCTTTGTCTGAGCTATGATTTAAGGTGAGA
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 TCAGAATGTTACAGCCGAACAGCCTTATTTTATAGAGGCCAGAGAAAAAATGGCAGATATTTATCTGAAG
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 CTTTTCTCTCCTTGGTATGCATACATGAATATTCTAGAGCCTGAAGAAGCCATAGTAGCATATGAGCA
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 TGCAGAGATTGCAAAACATTCTGTTGCTCAGCGAGACTATGAAAAGCAATTAAGTTTTATAGAGAGGCT
 CTGGTTCACTGCGAAACAGATAAAGATTATGTTGGAAGTGGCAGGATTACCTGGCACAAGATGACC
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 GATGGCTGATCTCATGTTTCAAGAAACAAGACTATGAACAAGCAGTGTTCATTTACAGCAGCTTTTAGAA
 CGTAAGCCAGATAAATTATGACATTATCTCGTTTATTGATCTCCTAAGAAGATGTGAAAACTCGAGG
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 CTGTTGGAGGTGAAGATTTGAAAACCTGGATGGAGACCTGGGTAATTCAACTGAGAAGCAAGAATCTGT
 GCAACTGGCAGTAAGAACAGCAGAAAAACTTCTTAAGGAACTAAAACCTCAGACTGTTCCAGGTCACGTA
 CAGCTTCGCATAATGAAAACCTATTGCTTAATGGCTACCAAACAGAAATCTAATGTTGAACAAGCATTAA
 ATACCTTCACTGAAATAGCAGCATCTGAGAAGGAGCATATCCAGCGCTCTTGGGAATGGCAACGGCTTA
 TATGATCTTGAACAGACTCCACGAGCCAGAAACCAGCTGAAGCGTATTGCGAAAATGAATTGGAATGCT
 ATTGATGCTGAAGAGTTTGAAGAAGATTGGCTGCTACTTGTGATATTTACATTCATCAGCAAAATATG
 ACATGGCAGAAGACCTGTTAAAACGGTGCCTGCGTCATAATAGATCTTGTGCAAAAGCTTATGAATATAT
 GGGATACATTATGAAAAAGAGCAAGCATATACAGATGCTGCCTTGAACCTATGAGATGGCATGGAATAT
 AGCAATCGGACAAATCCGGCAGTAGGATACAAACTGGCATTTAATTACTTAAAAGCAAAAAGATATGTGG
 ATTCAATTGACATATGTCACCAGGTTCTTGAAGCACATCCAACCTATCCAAAAATCAGAAAAGGATATACT
 TGATAAGGCCCGTGCCTTTAAGACCTTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Restriction Sites:

Please inquire

ACCN:

NM_024753

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 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.

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_024753.3](#), [NP_079029.3](#)

RefSeq Size: 4916 bp

RefSeq ORF: 3951 bp

Locus ID: 79809

UniProt ID: [Q7Z4L5](#)

Cytogenetics: 2q24.3

Domains: TPR

Protein Families: Protease

Gene Summary: This gene encodes a member of TTC21 family, containing several tetratricopeptide repeat (TPR) domains. This protein is localized to the cilium axoneme, and may play a role in retrograde intraflagellar transport in cilia. Mutations in this gene are associated with various ciliopathies, nephronophthisis 12, and asphyxiating thoracic dystrophy 4. [provided by RefSeq, Oct 2011]