

Product datasheet for **MC224033**

Ttbk2 (NM_001024856) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ttbk2 (NM_001024856) Mouse Untagged Clone
Tag: Tag Free
Symbol: Ttbk2
Synonyms: 2610507N02Rik; AI326283; B930008N24Rik; mKIAA0847; Ttbk; Ttbk1; TTK
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224033 representing NM_001024856
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGGAGGAGAGAGCAGCCAGATATCCTCAGTGTTGGAATCCTGGTCAAAGAAAGATGAAAGTGT
TAAGAAAGATTGGAGGTGGGGCTTTGGAGAAATTTACGATGCCTGGACATGCTCACCAGGAGAATGT
GGCGCTGAAGGTGGAGTCAGCTCAGCAGCCAAAGCAGTTCTGAAGATGGAGTTGCTGTGTTGAAGAAA
CTGCAAGGGAAAGACCATGTTTGTAGATTTATTGGCTGTGGGAGAAATGATCGTTTCAACTACGTGGTCA
TGCAATTCGAGGGACGGAATCTGGCAGATCTCCGCCGTAGCCAATCCCGGGGCACATTCCTATTAGCAC
TACCCCTCGTCTTGGAAACAGATTCTGGAGTCTATTGAAAGCATACATTCGTGGGATTCTTCACAGA
GACATCAAACCGTCAAACCTCGCCATGGGACGTTTCCCCAGTACATGTAGGAAATGTTTCATGCTTGATT
TTGGCTTGGCTCGACAATTTACTAATCCTGTGGTGACGTGACACCACCTCGTGTGGCAGGCTTTTCG
AGGGACAGTTCGTTATGCATCAATCAATGCTCATCGGAACAGGAAATGGGAAGACATGATGACCTTTGG
TCTTTATTCTACATGTTGGTGGAGTTTGTGGTTGGCAACTGCCTGGAGAAAAATAAAGGACAAGGAGC
AAGTAGGCTCCATTAAGGAGAGATATGACCACAGGCTCATGTTAAAACACCTCCCTCCAGAATTCAGCAC
CTTTCTTGACCATATTTCTCTTTGGATTATTTTACAAAACCGGACTACCAGCTTCTAACATCCGTGTTT
GACAATAGCATCAAGACCTTTGGAGTAATTGAGAGTGACCCGTTTACTGGGAGAAGAGTGGAACTGATG
GCTCCCTGACAACCACCACCCTCTGCCACCCTCAGCTGCACACCCGCTGACCCCTGCTGCTATCGG
AATTGCAAATGCCACCCCATCCAGGAGACTTGCTTCGAGAAAAACAGATGAAGTGTTCAGATGAA
CAGCTTAGTGATGGGAGAACGGAATCCCTGTTGGTGTATCACCAGATAAATGCCTGGATCTCTGGGGC
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ATGCCTCCAAGCCTGCCTCTGCCAACACCCCGGAGCAGGCAGATGGTGGTGGCAGCAACGGATTTATAGC
 TGTTAACTTAAGCTCTTGCAAACAGGAGGTTGATTCCAAGAATGGGTGATTGTGGACAAGGAGCAAGAC
 CTTTCAGGACTTTAGGACAAATGAGGTGTTAGGCCATAAGACAACCTGGAAGCCCTTCAGATGAGGAGCCTG
 AAGTGCTTCAGGTCTTGAGGGATCACCTCAAGATGAAAAGATCCAAGTAGGTCCTTGGACTGACAAACA
 TCACTTAAAGAAGGAAAGCTCAGGTGTGGTTTTAGCACTTTCTGCTGAATGCCCTGCTACTGCTGCTTCA
 GAAGTGTACACAGATAGGCTAGACCTCCAGGCTGGAGCTGCAAGTCAGTTCATCACAGTGACTCCCAAA
 GTCCCATGGAGGCACAAGCAGAAGGACCCCTGACTGCGATTACAATTCCTAGACCTTCTGTGGCATCAAC
 ACAGTCAACTTCAGGAAGCTTTCACTATGGCCCAACCAAGAGAAGAAAGATCTTCAGCCCTTGGAGCCC
 ACTGTAGAACTGTACTCTCCAAGGGAGAAGTCTCCGGCTTGGTTGTGACAGAGGGTGAAGTACTAGCTAGCG
 GAGGAAGCAGAGTGGATTTGGGACTTCAGATAGATCACACTGGTCATGACATGTTACCCAACATGAGAGA
 TGGTGACACATCTCAAGACTTGGGACAAAAGACCCTCCTGACCATAATAGATTAGCTGTGAAAAGATTT
 GAACATCTCCCTGGAGAAAAGAGAGAGAAGCCTTCTTCTGGGCTCAGAGAATGAAGATGAGAGGTTAA
 GTAAGGGCAGCACTGTATTGAAGTCTTCCCCAGGAGAGTTAGTGACTGCAGAGAGGGCTCAGTTAGC
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 GAGATAATGAAGCTTTTGGCAGTTGGAAGTTCAGAAAATTTCTCCTCAAGCCATTGACCCACATGCTGAAG
 GGAGATAGGCCAGATGGCAGCAATGCAGAAAAATAAGCTATTTAAAGATGATGGTATTCAGAGTGAAGG
 CTTGCCAAGGCAGCAGGGAGACCTCTCTGCTTTTTTGCACCAAGAGGGTAAAGAGAGAGAAAGTTGTCCT
 AGAAATGGAGAGCTCTATCATTGTGTCTCAGAGAATGAGCATGGTCTCCTACTCGGAAGGACATGCTCC
 GGTCTATCCTTTGTGACCAGGCACAGCCGGATCCCTGTTTTAGCACAAGAAATAGACTCAACTTTTGAATC
 ATCCTCTGCTATTTCTGCAAAAAGAAAAGCTTCTACAGAAGAAAGCCTATCAGCCAGAAATAGTCAAAGT
 CTTGTAGAAAAAGGCAGTTCAAGTCTTCTGGGAGACCTCTCAAGTGCCTCTGATAAGCTGATAGAGG
 AGAAACTAGCCGCTGTTCCAGTCCCTTTTCTGAGGAGGAAGTCTCGCTCCCTTTCTAGACTGGCAGC
 AGATTCACCTGAGTAGATCAGTTGAAGATAGCTTTCTGTCAACCATCATCTCCAGGCTAGAAAAGAGC
 AAGATTCCAAGGCCAGTATCCTGGGTGAGCAGACAGATCAAATTAATGGCTCCGCTTACCTCAGTTCTTGC
 CTCGGCCACCACAGAAAGCCACCAGTCAAGCCTGGAGTGAAGCCAGGCTACGCAGATATAAAGTTCT
 AGGGAGTAGTAACTCTGACTCAGACCTTTTCTCTCGCCTGGCCCAAATTTCTCAAATGGATCTCAGAAA
 TCCCGGAGTACTACCAATGCAAGAGCCCAGGATCTCCTCACAATCCAAAAACACCACCAAGAGTCCAG
 TTGTACCTCGAAGGAGTCCAGTGCCTCTCCTCGAAGCTCATCCTTGCCTCGAACATCTAGTTCTCACC
 ATCTAGGGCTGGACGGCCCAACATGACCAGAGGAGTTCTTCCACATCTGGGAGAAGCAAGTCAACC
 CCTAGCCACTCAGGATCATCGTCTCCAGGAGTCTGCAACAGGAGCATTGCAAAACCCAGCAAGATG
 GCCAAAAGGATCTGGCAGCCTCCACCACCACTCAACCAGCTCTAAAACCTCCCCAGGGAAGAGTAAAGCC
 AGCCAGTAAACTCAGCAGATAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_001024856

Insert Size:

3732 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:

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_001024856.2](#), [NP_001020027.1](#)

RefSeq Size: 11152 bp

RefSeq ORF: 3732 bp

Locus ID: 140810

UniProt ID: [Q3UVR3](#)

Cytogenetics: 2 E5

Gene Summary: Serine/threonine kinase that acts as a key regulator of ciliogenesis: controls the initiation of ciliogenesis by binding to the distal end of the basal body and promoting the removal of CCP110, which caps the mother centriole, leading to the recruitment of IFT proteins, which build the ciliary axoneme. Has some substrate preference for proteins that are already phosphorylated on a Tyr residue at the +2 position relative to the phosphorylation site. Able to phosphorylate tau on serines in vitro.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) has a different 5' end exon compared to transcript variant 1. It encodes an isoform (2) that is shorter and with a distinct N-terminus compared to isoform 1. Variants 2 and 3 encode the same isoform.