

Product datasheet for MC223905

Tbcd (NM_029878) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tbcd (NM_029878) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tbcd
Synonyms:	2310057L06Rik; A030005L14Rik; mKIAA0988
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223905 representing NM_029878 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTACTGAGCAATGAGCCGGCTGCGAGCGCCGCCGAGGAGGAGGTGGAGGATGATGCGCTTGTTTCGCG
CCTCCGCCCTGGAAGCGTTCGGCGAGAGTGGGAGACCCGCGCTGCTCCGAGCTTGCCGCGGTGCA
CAGAGAGCGCGCTCCCGGAGGTGGCGGAGGAGCGGTTCCGCGTAATTATGGACAAATACCAGGAGCAG
CCCCACCTCCTGGATCCACACCTTGAGTGGATGATGAACACTGTTGGACCTGGTACAGGATGAGACAT
CTCTGCCCGACCTTGCCATCTGGCTTTAAGTTTCTTTATATCATCACCAAGGTTTCGTGGATATAAAGT
GTTTCTGCGTCTGTTCCCTCACGAAGTGGCTAATGTTTCAGCCTGTGTTAGATATGTTACAGGTCAGAAC
CCTAAAGACCATGAGACGTGGGAAACACGCTACATGCTTCTACTGTGGCTCTCTGTGACCTGCTTGATCC
CTTTTGATTTTTACGCTTGATGGAACTGTCTACTCAAACCTGGAGAAACACGAGTACCCACCATGGA
CCGAATTCTGCAATAGCAGAGTCTTACTTGGTGGTCAGTGACAAGGCGCGAGATGCAGCTGCTGTCCTT
GTGTCAAATTTATCACACGTCCCGATGTCAAGCAGAGAAAGATGGCCAGCTTTCTGGACTGGAGCCTTT
GCACCTTGCCCACTCTTCTCCAGACCATCGAGGGTGCATTACCATGGATGGATGCTGCAGGCCCT
GGCTCAAATATTAAGCATGGAAAACGTGAAGACTGCCTCCCTATGCCAACACTGTGCTCCAGTGCCTC
GACGGCTGACACTCCCGAGAGCAGTCATACCTCGCTGCGGAAGCTTGGTGTGAAGCTTGTCCAGAGGC
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TAACCTGAAGCTCTGTGCCCCGGTAAGAGTGACCAGAAGCTGCTGTCTGATAGTTTGACCTCTGATGGT
GATGAAGACTATGATGTCCAGAGGGGGTGAAGACTGTGATAGAGCAGCTACTGGTTGGGTTGAAGGACA
AGGACACTGTGGTGGTGGTCTGCAGCGAAAGGAATTGGTAGGATGGCTGGAAGGCTTCCAGAGAGCT
GGCCGATGATGTGGTGGGTCTGTGTTGGACTGTTTCAGTTTTCCAGGAGACGGATAAGGCATGGCATGGT
GGATGTCTGGCATTGGCAGAGCTGGGTAGACGAGGCTGTTGCTACCATCCAGACTCTCAGAGTTGTCA
CGGTGATCCTGAAGGCCCTTACCTACGATGAGAAGCGGGTGCCTGCAGCGTTGGGGCAATGTCAGGGA
TGCTGCCTGTTATGTGTGCTGGCTTTGCACGTGCCTATGAACCTCAGGAGTTGACACCTTTTGTGACT



GCCATTTCAAGTGCCCTGGTCATTGCTGCTGTATTTGACCGAAATGTGAACTGCAGAAGAGCAGCCTCTG
 CTGCCCTCCAGGAGAACGTGGGGAGACAGGGTACTTTCCCTCATGGAATTGATATTTTACTACAGCAGA
 CTATTTTGCAGTTGGTAACATATCTAACTGTTTCTGATTATAAGTGTGTTTATTGCTGGCTCCAGGAA
 TACACCAAGCCCATGATTGATCACCTGGTCTCCATGAAAATCAACCATTGGGATGGGGCCATCCGAGAAC
 TGTCTGCAAAGGCATTGCACAACCTGACTCCACAAGTACCCGAGTACATAGCCATGCACGTATCCCTGC
 ACTACTGTTGATGACACAGAGTCCAGATCTACACAGAGACATGGTGCCATCCTTGCCCTGTCAGAGGTC
 ACCATGCCCTGTACAAGCTGGCCACACAGAGTAACAGGCTTGTACAGACTATCTGGATGAGAAGGCAG
 TGCAAAGCCTGAAGCAGATCCACCAGCAGCTTTGTGACCGCCATCTCTATAGGGGTCTTGAGGAGAGCT
 TATGAGACAAGCAGTGTGCATCTTAATAGAGAAGCTGTCACTTTCCAGAATGCCATTTAAAGGGGACGCC
 ACTGTGCAAGGTTGGCAGTGGCTGATAAATGACACTCTCAGGAGTCTTACCTTGTTTCAAGCCATTCCA
 GACAACAGATCAAGGAGGTGGCTGTCTCTGCCCTGACTGCCCTCTGCAGTGAATACTACGTGAAGGAGCC
 TGGGGAGGCAGGCTCTCCATCGGAAGGAGCTGATCCCCAGTACCTTGTGAGCTCCAGAGCCCAGAG
 GAGATGGCCCGTGTGGCTTTTCTCAGCCTTGGGTGCCCTCCCAGGTTTCTTCTCAGGGGCCATCTGC
 AGCAGGTTCTCTCAGGTCTGAGAAGAGTCACTGTATTTCTCCAATGATGTGAGCTTTGCTGAAGCCCG
 GAGAGATGGTTTGAAGCAATCTCAAGAATTTGCCAGACGGTTGGTGTGAACACACGGGGCCCTCCAGAT
 GAAGTCATATGCAAAGAGAACATCTCTGAGGTTTATGCTGCATTGCTGGGCTGCATGAGTGATTACACCA
 CAGACAGCAGAGGGGATGTGGGAGCCTGGGTTCGTGAGGCTGCCATGACCAGCCTCATGGATTTGATGCT
 TTTGCTGGCACGGACAGAGCCGGTGTGATTGAGGCCACATCTGTGAGCGGTCATGTGTTGCGTTGCC
 CAGCAAGCAAGTGAAGATTGATCGGTTCCGTGCTCATGCTGCCCGGGTGTCTTGACTCTTTGCACT
 TCGACAGCCCTCCATTCCCATGTTCCCCACCGCCAAGAAGTCTGTTTCCAGGTCTGATGT
 GGCCACTGTGAACTGGAACGCACCTTCCAGGCCTTCCCTCTCATCACCAGCTCTTGGGATTGCCTACC
 TATAGATACCATGTCTGCTGGGGCTGGCTGTCTGTGGGTGGCTTACAGAGTCTACGGTCAGACATT
 CTACACAGAGCCTCTTTGAGTACATGAAGGGGATTGAGAAGGATGCTCAGGTCTGCAGAGCTTCAAGTGA
 GACCCTCCTGAAGGTCTTTGAGGACAACCTTTTGAATGATAGGGTGTCTGTATCACTGCTGAAAATGCTG
 GACCAGCTGTTGGCTAATGGGTGCTTTGACATCTTTACTGCCGAGGAGAACCACCCCTTTTGTGTGAAGT
 TGCTCACACTTTGTAAGGAAGAAATCAAGAAGTCAAAAGACATCCAGAACTTCGGTCAAGCATCGCAGT
 GCTCTGTGGGATGGTGCAGTTCAATGGTGTGAGAAAGAAGATTCTTCTCAGCTGTTCTCCTCCTCCTC
 GGCCACCCCTTCCCTGTGATCCGGAAGAGCACAGCGAGCCAGGTCTACGAGATGGTGTTACCTACAGCG
 ACCTGGTAGATGCCGAGGTGCTTGATGAGGTGATGTCTGTGCTCAGTGACACAGCCTGGGACGCAGAGCT
 TCCAGTTGTAAGAGAACAGCGGAATCGCCTGTGTGACCTTCTTGGCGTGCCAGACCCAGCTGGTTCCA
 AAGCCTATTCCAGGAAGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja3310_d04.zip

Restriction Sites: Sgfl-Mlul

ACCN: NM_029878

Insert Size: 3591 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_029878.3](#), [NP_084154.1](#)

RefSeq Size: 3912 bp

RefSeq ORF: 3591 bp

Locus ID: 108903

UniProt ID: [Q8BYA0](#)

Cytogenetics: 11 E2

Gene Summary: Tubulin-folding protein implicated in the first step of the tubulin folding pathway and required for tubulin complex assembly. Involved in the regulation of microtubule polymerization or depolymerization, it modulates microtubule dynamics by capturing GTP-bound beta-tubulin (TUBB). Its ability to interact with beta tubulin is regulated via its interaction with ARL2. Acts as a GTPase-activating protein (GAP) for ARL2. Induces microtubule disruption in absence of ARL2. Increases degradation of beta tubulin, when overexpressed in polarized cells. Promotes epithelial cell detachment, a process antagonized by ARL2. Induces tight adherens and tight junctions disassembly at the lateral cell membrane. Required for correct assembly and maintenance of the mitotic spindle, and proper progression of mitosis. Involved in neuron morphogenesis.[UniProtKB/Swiss-Prot Function]