

Product datasheet for **MR207181**

Tubb3 (NM_023279) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tubb3 (NM_023279) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tubb3
Synonyms:	3200002H15Rik; M(beta)3; M(beta)6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207181 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGGGAGATCGTGCACATCCAGGCCGGCCAGTGCGCCAACAGATAGGGGCCAAGTCTGGGAGGTCA
 TCAGCGATGAGCACGGCATAGACCCAGCGGCAACTATGTAGGGACTCAGACCTGCAGCTGGAGCGCAT
 CAGCGTATACTACAATGAGGCCCTCTCTACAAGTATGTGCCAGGGCCATTCTGGTGGACTTGGAACT
 GGAACCATGGACAGTGTTCTGGTCTGGCGCTTTGGACACCTATTCAGGCCGACAACCTTTATCTTTGGT
 AGAGTGGTCTGGCAACAAGTGGCCAAAGGGCACTATACGGAGGGCGCGGAGCTGGTGGACTCAGTCT
 AGATGTCGTGCGGAAAGAGTGTGAGAATTGTGACTGCCTGCAGGGCTTCCAGCTGACACACTCACTGGGT
 GGGGGCACAGGCTCAGGCATGGCACACTGCTCATCAGCAAGGTGCGTGAGGAGTACCCCGACCGCATCA
 TGAACACCTTCAGCGTGGTGCCTTACCCAAAGTGTCCGACACTGTGGTGGAGCCCTACAACGCCACCT
 GTCATCCACCAGCTAGTGGAGAACACAGACGAGACCTACTGCATCGACAATGAAGCCCTCTACGACATC
 TGCTTCCGCACCCTCAAGCTGGCCACACCACCTATGGGGACCTCAACCACCTTGTGTCTGCCACCATGA
 GTGGAGTCAACACCTCCCTTCGATTCCCTGGTCACTCAATGCCGACCTCCGCAAGCTGGCTGTGAACAT
 GGTGCCGTTCCACGCTCTCCACTTCTTCATGCCCGGCTTCGCCCACTTACAGCCCGGGGACGCCAGCAG
 TACCGTGCCCTGACGGTGCCTGAGCTCACGCAGCAGATGTTTCGATGCCAAGAACATGATGGCTGCCTGTG
 ACCCGCGCCACGGTGCCTACCTGACCGTGGCCACTGTCTCCGTGGGCGCATGTCTATGAAGGAGGTGGA
 CGAGCAGATGTGGCCATCCAGAGTAAGAACAGCAGCTACTTCGTGGAGTGGATCCCCAACACGTCAAG
 GTAGCCGTGTGTGACATCCCACCCCGTGGGCTCAAAATGTCATCCACCTCATTGGCAACAGCACGGCCA
 TCCAGGAGCTGTTCAAACGCATCTCGGAGCAGTTCACAGCCATGTTCCGGCGCAAGGCCTTCTGCACTG
 GTACACGGGCGAGGGCATGGATGAGATGGAGTTCACCGAGGCCGAGAGCAACATGAATGACCTGGTGTCC
 GAGTACCAGCAGTACCAGGACGCCACTGCGGAGGAGGAGGGGAGATGTGAAGATGATGACGAGGAAT
 CGGAAGCCAGGGGCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207181 protein sequence
 Red=Cloning site Green=Tags(s)

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPSGNYVGDSDLQLERISVYNEASSHKYVPRAILVDLEP
 GTMDSVRSAGFGHLFRPDNFI FGQSGAGNNWAKGHYTEGAELVDSVLDVVRKECENCDCQLQGFQLTHSLG
 GGTGSGMGTLLISKVREEYPDRIMNTFSVVPSPKVS DTVVEPYNATLSIHQLVENTDETYCIDNEALYDI
 CFRTLKLATPTYGDLNHLVSATMSGVTTSLRFPGLNADLRKLA VNMVFPRLHFFMPGFAPLTARGSQQ
 YRALTVPELTQQMFDANKMMAACDPRHG RYLTVATVFRGRMSMKEVDEQMLAIQSKNSSFVEWIPNNVK
 VAVCDIPRGLKMSSTFIGNSTAIQELFKRISEQFTAMFRRKAF LHWYTGEGMDEMEFTEAESNMNDLVS
 EYQYQDATAEEEGEMYEDDDEESEAQGPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_023279

ORF Size: 1353 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.

RefSeq: [NM_023279.3](#)
RefSeq Size: 1758 bp

RefSeq ORF: 1353 bp

Locus ID: 22152

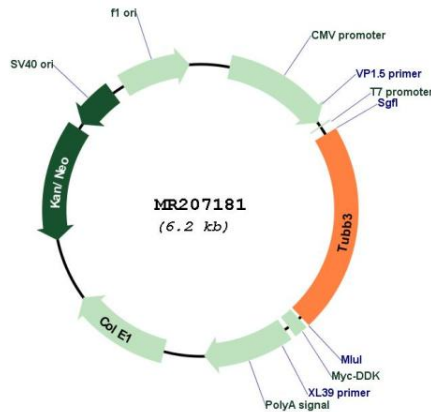
UniProt ID: [Q9ERD7](#)

Cytogenetics: 8 E1

MW: 50.4 kDa

Gene Summary: Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha chain. TUBB3 plays a critical role in proper axon guidance and maintenance. Binding of NTN1/Netrin-1 to its receptor UNC5C might cause dissociation of UNC5C from polymerized TUBB3 in microtubules and thereby lead to increased microtubule dynamics and axon repulsion (PubMed:28483977). Plays a role in dorsal root ganglion axon projection towards the spinal cord (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207181