

Product datasheet for **RC200755**

beta III Tubulin (TUBB3) (NM_006086) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	beta III Tubulin (TUBB3) (NM_006086) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	beta III Tubulin
Synonyms:	beta-4; CDCBM; CDCBM1; CFEOM3; CFEOM3A; FEOM3; TUBB4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200755 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGGGAGATCGTGCACATCCAGGCCGGCCAGTGCGCCAACAGATCGGGGCCAAGTTCTGGGAAGTCA
 TCAGTGATGAGCATGGCATCGACCCAGCGGCAACTACGTGGGCGACTCGGACTTGCAGCTGGAGCGGAT
 CAGCGTCTACTACAACGAGGCCTCTTCTACAAGTACGTGCCTCGAGCCATTCTGGTGGACCTGGAACCC
 GGAACCATGGACAGTGTCCGCTCAGGGGCTTTGGACATCTTTCAGGCCTGACAATTTTCATCTTTGGTC
 AGAGTGGGGCCGCAACAACCTGGGCCAAGGGTCACTACACGGAGGGGGCGGAGCTGGTGGATTCCGTCT
 GGATGTGGTGGGAAGGAGTGTGAAAACGCGACTGCCTGCAGGGCTTCCAGCTGACCCACTCGTGGGG
 GCGGCACGGGCTCCGGCATGGCACGTTGCTCATCAGCAAGGTGCGTGAGGAGTATCCCGACCGCATCA
 TGAACACCTTCAGCGTCGTGCCCTCACCAAGGTGTCAGACACGGTGGTGGAGCCCTACAACGCCACGCT
 GTCATCCACCAGCTGGTGGAGAACACGGATGAGACCTACTGCATCGACAACGAGGCGCTCTACGACATC
 TGCTTCCGCACCCTCAAGCTGGCCACGCCACCTACGGGGACCTCAACCACCTGGTATCGGCCACCATGA
 GCGGAGTCAACACCTCCTTGCGCTTCCCGGCCAGCTCAACGCTGACCTGCGCAAGCTGGCCGTCACAT
 GGTGCCCTTCCCGCCCTGCACTTCTTCATGCCCGGCTTCGCCCCCTCACAGCCCGGGGAGCCAGCAG
 TACCGGGCCCTGACCGTGCCCGAGCTCACCCAGCAGATGTTTCGATGCCAAGAACATGATGGCCGCTGCG
 ACCCGCCACCGCCGCTACCTGACGGTGGCCACCGTGTTCGGGGCCGATGTCATGAAGGAGGTGGA
 CGAGCAGATGCTGGCCATCCAGAGCAAGAACAGCAGCTACTTCGTGGAGTGGATCCCCAACACGTGAAG
 GTGGCCGTGTGTGACATCCCGCCCCGCGCCTCAAGATGTCTCCACCTTCATCGGGAACAGCACGGCCA
 TCCAGGAGCTGTTCAAGCGCATCTCCGAGCAGTTCACGGCCATGTTCCGGCGCAAGGCCTTCTGCACTG
 GTACACGGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCGGAGAGCAACATGAACGACCTGGTGTCC
 GAGTACCAGCAGTACCAGGACGCCACGGCCGAGGAAGAGGGCGAGATGTACGAAGACGACGAGGAGGAGT
 CGGAGGCCAGGGCCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200755 protein sequence
 Red=Cloning site Green=Tags(s)

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPSGNYVGDSDLQLERISVYNEASSHKYVPRAILVDLEP
 GTMDSVRSAGFGHLFRPDNFI FGQSGAGNNWAKGHYTEGAELVDSVLDVVRKECENCDCQLQGFQLTHSLG
 GGTGSGMGTLLISKVREEYPDRIMNTFSVVPSPKVSdTVEPYNATLSIHQLVENTDETYCIDNEALYDI
 CFRTLKLATPTYGDLNHLVSATMSGVTTSLRFPQGLNADLRKLA VNMVFPRLHFFMPGFAPLTARGSQQ
 YRALTVPELTQQMFDANKMMAACDPRHGRYLTVATVFRGRMSMKEVDEQMLAIQSKNSSFVEWIPNNVK
 VAVCDIPRGLKMSSTFIGNSTAIQELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVS
 EYQYQDATAEEEGEMYEDDEESEAQGPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6078_h03.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_006086

ORF Size: 1350 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_006086.4](#)

RefSeq Size: 1794 bp

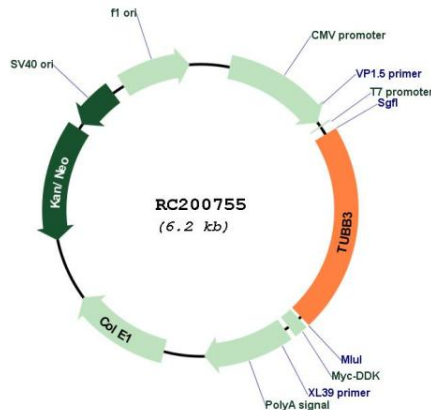
RefSeq ORF: 1353 bp

Locus ID: 10381

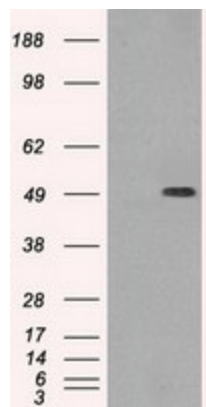
UniProt ID: [Q13509](#)
Cytogenetics: 16q24.3
Domains: tubulin
Protein Families: Druggable Genome, ES Cell Differentiation/IPS
Protein Pathways: Gap junction, Pathogenic Escherichia coli infection
MW: 50.4 kDa

Gene Summary: This gene encodes a class III member of the beta tubulin protein family. Beta tubulins are one of two core protein families (alpha and beta tubulins) that heterodimerize and assemble to form microtubules. This protein is primarily expressed in neurons and may be involved in neurogenesis and axon guidance and maintenance. Mutations in this gene are the cause of congenital fibrosis of the extraocular muscles type 3. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 6. [provided by RefSeq, Oct 2010]

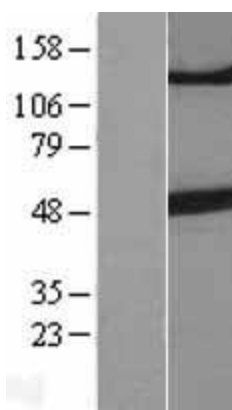
Product images:



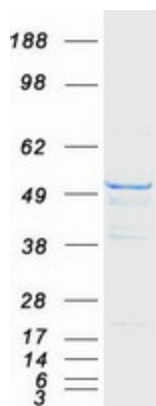
Circular map for RC200755



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TUBB3 (Cat# RC200755, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TUBB3 (Cat# [TA500047]). Positive lysates [LY416872] (100ug) and [LC416872] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416872]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200755 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TUBB3 protein (Cat# [TP300755]). The protein was produced from HEK293T cells transfected with TUBB3 cDNA clone (Cat# RC200755) using MegaTran 2.0 (Cat# [TT210002]).