

## Product datasheet for **RC238562**

### beta IV Tubulin (TUBB4A) (NM\_001289123) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	beta IV Tubulin (TUBB4A) (NM_001289123) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TUBB4A
Synonyms:	beta-5; DYT4; TUBB4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RC238562 representing NM\_001289123  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGAAGGGGGCTGCGGACCGAGAACTGAGCGGCTCCCGGGGCGCAGGGACCGTGCTCCGCCGTCT  
 CGGCCGATCTTCCACCCTCGCCGCCCGCAGCTCCCGCGCTCGTGCCACCGCCGCGGTCCACCCT  
 CAGCGCCACCGCCATGCGGGAGATCGTGCACTGCAGGCCGCCAGTGCGGCAACCAGATCGGGGCAAG  
 TTTTGGGAGTTATCAGTGACGAACATGGCATCGACCCACAGGCACATAACCATGGGACAGTGACCTGC  
 AACTGGAGAGGATCAACGTGTACTACAACGAGGCCACAGGAGAAATTATGTCCCAGAGCGGTGCTGGT  
 GGACCTGGAACCCGGCACCATGGACTCTGTCCGTTCTGGCCCTTCGGTCAGATCTTTCGGCCGGACAAC  
 TTCGTGTTGGCCATCCGGAGCCGGAACAACGGGCAAGGGGCACTACACGGAGGGCGCAGAGCTGG  
 TGGACGCTGTCTGGACGTAGTCCGAAGGAGGCCGAGAGCTGCGACTGCCTTCAGGGCTCCAGCTGAC  
 CCACTCGCTGGGGGTGGCAGCGGGTCCGGAATGGGCACGCTGCTCATCAGTAAGATCCGCGAGGAGTTC  
 CCAGACCGCATCATGAACACCTTCAGCGTGGTGCCTCGCCCAAAGTGTCAGACACGGTGGTGGAGCCCT  
 ACAACGCCACGCTGTCTGTGCACCAGCTGGTGGAGAATACGGATGAGACCTACTGCATCGACAACGAGGC  
 ACTCTACGACATCTGTTCCGCACCCTCAAGCTGACCACCCACCTACGGGGACCTCAACCACCTGGTG  
 TCGGCCACCATGAGCGGGGTCAACACCTGCCTGCGCTTCCCGGGCCAGCTGAACGCCGACCTGCGCAAGC  
 TGGCCGTCAACATGGTTCCTTTCTCGCTGCACTTCTTCATGCCCGGCTTCGCACCCCTGACCAGCCG  
 GGGCAGCCAGCAGTACCGGGCCCTGACGGTGCCGAGCTCACCCAGCAGATGTTTCGATGCCAAGAACATG  
 ATGGCGCGTGCACCCGCGCCACGCGCCTACCTGACCGTGGCCGCGTGTTCGGGGCCGATGTCCA  
 TGAAGGAGTGGACGAGCAGATGCTGAGCGTGCAGAGCAAGAACAGCAGCTACTTCGTGGAGTGGATCCC  
 CAACAACGTGAAGACGGCCGTGTGCGACATCCCGCCCGCGCCCTGAAGATGGCCCGACCTTCATCGGC  
 AACAGCACGGCCATCCAGGAGCTGTTCAAGCGCATCTCCGAGCAGTTCACGGCCATGTTCCGGCGCAAGG  
 CCTTCTTGCACTGGTACACGGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCCGAGAGCAACATGAA  
 TGACCTGGTATCTGAGTACCAGCAGTACCAGGACGCCACGCGGAGGAGGGCGAGTTCGAGGAGGAGGCC  
 GAGGAGGAGGTGGCC

**ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT**  
**ACAAGGATGACGACGATAAGGTTTAA**

**Protein Sequence:**

>RC238562 representing NM\_001289123  
 Red=Cloning site Green=Tags(s)

MRRGAADRETERLPGAQGPCSAVSAASSTLAAAAAPRARATAAATLSATAMREIVHLQAGQCGNQIGAK  
 FWEVISDEHGIDPTGYHGDSDLQLERINVYYNEATGGNYVPRAVLVDLEPGTMDSVRSGPFGQIFRPDN  
 FVFGQSGAGNNWAKGHYTEGAELVDAVLDVVRKEAESCDLQGFQLTHSLGGGTGSGMGTLLISKIREEF  
 PDRIMNTF SVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDIFRTLKLTPTPYGDLNHLV  
 SATMSGVTTCLRFPGQLNADLRKLAVMVPPFRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDKNNM  
 MAACDPRHGRYLTVAAVFRGRMSMKEVDEQMLSQSKNSSYFVEWIPNNVKTAVCDIPPRGLKMAATFIG  
 NSTAIQELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEGEFEEEE  
 EEEVA

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Restriction Sites:**

SgfI-MluI

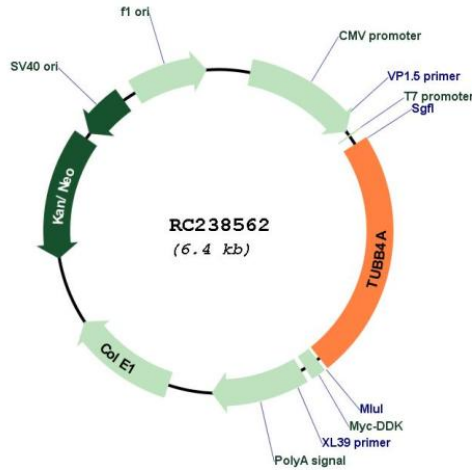
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_001289123
<b>ORF Size:</b>	1485 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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\\_001289123.1](#), [NP\\_001276052.1](#)

**RefSeq Size:** 2501 bp

**RefSeq ORF:** 1488 bp

**Locus ID:** 10382

**UniProt ID:** [P04350](#)

**Cytogenetics:** 19p13.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Gap junction, Pathogenic Escherichia coli infection

**MW:** 54.9 kDa

**Gene Summary:** This gene encodes a member of the beta tubulin family. Beta tubulins are one of two core protein families (alpha and beta tubulins) that heterodimerize and assemble to form microtubules. Mutations in this gene cause hypomyelinating leukodystrophy-6 and autosomal dominant torsion dystonia-4. Alternate splicing results in multiple transcript variants encoding different isoforms. A pseudogene of this gene is found on chromosome X. [provided by RefSeq, Jan 2014]