

Product datasheet for **RG238201**

alpha Tubulin (TUBA4A) (NM_001278552) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	alpha Tubulin (TUBA4A) (NM_001278552) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TUBA4A
Synonyms:	ALS22; H2-ALPHA; TUBA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238201 representing NM_001278552. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGCAATGCCTGCTGGGAGCTCTATTGCTTGGAAACATGGGATTCAGCCTGATGGGCAGATGCCAGT
GACAAGACCATTGGTGGAGGGGACGACTCCTTCACCACCTTCTTCTGTGAAACTGGTGTGGAAAACAC
GTACCCCGGGCAGTTTTTGTGGATCTGGAGCCTACGGTCATTGATGAGATCCGAAATGGCCCATACCGA
CAGCTCTCCACCAGAGCAGCTCATCACTGGGAAAGAGGATGCTGCCAACAATATGCCCGTGGTCAC
TATACCATTGGCAAGGAGATCATTGACCCAGTGTGGATCGGATCCGCAAGCTGTCTGACCAGTGCACA
GGACTTCAGGGCTTCTGGTGTCCACAGCTTTGGTGGGGCAGTGGCTCTGGCTTCACCTCACTCCTG
ATGGAGCGGCTCTCTGTTGACTATGGCAAGAAATCCAAGCTGGAATTCTCCATCTACCCAGCCCCCAG
GTGTCTACAGCCGTGGTGCAGCCCTACAACCTATCCTGACCACCCACACCACCTGGAGCACTCAGAC
TGTGCCTTCATGGTGGACAACGAAGCAATCTATGACATCTGCCGCGCAACCTAGACATCGAGCGCCCA
ACCTACACCAACCTCAATCGCCTCATTAGCCAAATTTGCTCCTCCATCACAGCTTCTCTGCGCTTTGAC
GGGGCCCTCAATGTGGACCTGACAGAGTTCCAGACCAACCTGGTGCCTACCTCGCATCCACTTCCCC
CTGGCCACCTATGCACCAGTCACTCTGCAGAAAAGGCATACCACGAGCAGCTGTGGTGGCAGAGATC
ACCAATGCCTGCTTTGAGCCTGCCAACCAGATGGTAAAGTGTGATCCCCGGCACGGCAAGTACATGGCC
TGTCCTGCTGTACCGTGGAGATGTGGTGCCTAAGGATGTCAACGCTGCCATTGCCCATCAAGACC
AAGCGCAGCATTCAAGTTTGTGGACTGGTGCCTCCAGGCTTCAAGGTTGGTATCAACTACCAGCCTCCC
ACTGTGGTGCCTGGGGGTGACCTGGCCAAGGTGCAGCGTGCCGTGTGCATGCTGAGCAACACGACCGCC
ATCGCCGAGGCGCTGGCCCGCTGGACCACAAGTTCGACCTGATGTATGCCAAGAGGGCGTTTGTGCAC
TGGTATGTGGGTGAGGGCATGGAGGAGGTGAGTTCTCCGAGGCCGTGAGGATATGGCTGCCCTGGAG
AAGGATTATGAGGAGGTGGGCATCGACTCCTATGAGGACGAGGATGAGGGAGAAGAA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



[View online »](#)

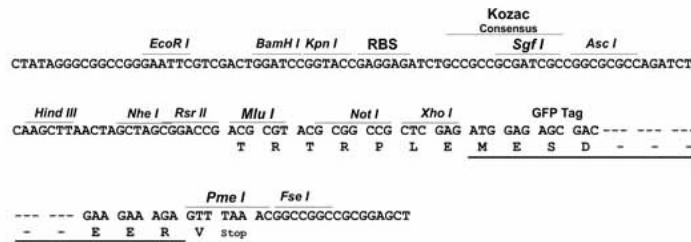
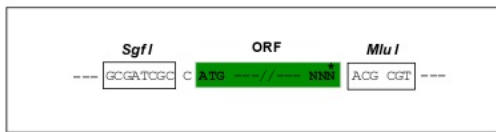
Protein Sequence: >Peptide sequence encoded by RG238201
 Blue=ORF Red=Cloning site Green=Tag(s)

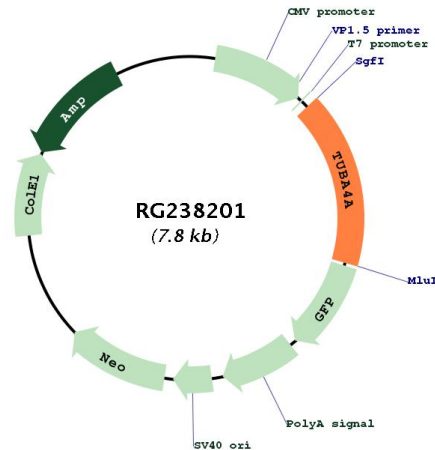
MGNACWELYLEHGIQPDGQMPSDKTIGGGDSFTTFFCETGAGKHVPRAVFDLEPTVIDEIRNGPYR
 QLFHPEQLITGKEDAANNYARGHYTIGKEIIDPVLDRIRKLSdqCtGLQGLVFHsFGGGTGSgFTsLL
 MERLSVDYgKKSLEfSIYPAPQVSTAVVEPYNSILtTHTTLEHSDCAFmVDNEAIYDICRRNLDIERP
 TYTNLNRlISQIVSSITAsLRFDGALNVDLteFQTNLVPYPRiHFPLATYAPVISAeKAYHEQLSVAEI
 TNACfEPANQmVKCDPRHGkYMACCLLYRGDVVPKDVNAIAAIKTKRSIQfVDWCPTGfKVGINyQPP
 TVVPGDLAKVQRAVCMLSNtTAIAEAWARLDHKFDLMyAKRAfVHWYVgEGMEEGfSEAREDMAALE
 KDYEeVGIDSYeDEDEGEE
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMkSTKGALTFSPYLLSHV
 MGyGFyHfGTYPsGYENPFLHAIInGGYtNTRIEKYEDGGVLHVSfSYRYEAGrVIGDFkVMGTGFPEd
 SVIFtDKIIRSNATVEHLHPMGDNDLDGSfTRtFSLRDGGYySSVVDShMHfKSAIHPSILQNGGPMFA
 FRRVEEDHSntELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001278552

ORF Size: 1299 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).

RefSeq: [NM_001278552.1](#), [NP_001265481.1](#)

RefSeq Size: 2499 bp

RefSeq ORF: 1302 bp

Locus ID: 7277

UniProt ID: [P68366](#)

Cytogenetics: 2q35

Protein Families: Druggable Genome

Protein Pathways: Gap junction, Pathogenic Escherichia coli infection

MW: 48.8 kDa

Gene Summary:

Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulin. The genes encoding these microtubule constituents are part of the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta and gamma tubulin families are found in all eukaryotes. The alpha and beta tubulins represent the major components of microtubules, while gamma tubulin plays a critical role in the nucleation of microtubule assembly. There are multiple alpha and beta tubulin genes and they are highly conserved among and between species. This gene encodes an alpha tubulin that is a highly conserved homolog of a rat testis-specific alpha tubulin. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2013]