

Product datasheet for **RG200746**

alpha Tubulin (TUBA4A) (NM_006000) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	alpha Tubulin (TUBA4A) (NM_006000) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	alpha Tubulin
Synonyms:	ALS22; H2-ALPHA; TUBA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG200746 representing NM_006000
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGTGAATGCATCTCAGTCCAGTGGGGCAGGCAGGTGCCAGATGGGCAATGCCTGCTGGGAGCTCT
 ATTGCTTGAACATGGGATTGAGCCTGATGGGCAGATGCCAGTGACAAGACCATTGGTGGAGGGGACGA
 CTCTTACCACCTTCTTCTGTGAAACTGGTGCTGAAAAACACGTACCCCGGCAGTTTTTGTGGATCTG
 GAGCTACGGTCAATTGATGAGATCCGAAATGGCCATACCGACAGCTCTCCACCCAGAGCAGCTCATCA
 CTGGGAAAGAGGATGCTGCCAACAACTATGCCCGTGGTCACTATACCATTGGCAAGGAGATCATTGACCC
 AGTGTGGATCGGATCCGCAAGCTGTCTGACCAGTGCACAGGACTTCAGGGCTTCTGGTGTCCACAGC
 TTTGGTGGGGCACTGGCTCTGGCTTACCTCACTCTGATGGAGCGGCTCTCTGTTGACTATGGCAAGA
 AATCCAAGCTGGAATTCTCCATCTACCCAGCCCCCAGGTGTCTACAGCCGTGGTCGAGCCCTACAACCT
 TATCTGACCACCCACACCCTGGAGCACTCAGACTGTGCCTTCATGGTGGACAACGAAGCAATCTAT
 GACATCTGCCCGCCAACCTAGACATCGAGCGCCAACCTACACCAACCTCAATCGCCTCATTAGCCAAA
 TTGTCTCCTCCATCACAGCTTCTCTGCGCTTTGACGGGGCCCTCAATGTGGACCTGACAGAGTCCAGAC
 CAACCTGGTGGCCTACCCTCGCATCCACTTCCCCTGGCCACCTATGCACCAGTCATCTCTCGAGAAAAG
 GCATACCACGAGCAGCTGTCCGTGGCAGAGATCAACATGCCTGCTTTGAGCCTGCCAACAGATGGTAA
 AGTGTGATCCCCGGCACGGCAAGTACATGGCCTGCTGCCTGTGTACCGTGGAGATGTGGTGGCCAAAGGA
 TGTCAACGCTGCCATTGCCGCCATCAAGACCAAGCGCAGCATTAGTTTGTGGACTGGTGGCCACAGGC
 TTCAAGTTGGTATCAACTACCAGCCTCCACTGTGGTGCCTGGGGTGACCTGGCCAAGGTGCAGCGTG
 CCGTGTGCATGCTGAGCAACACGACCGCCATCGCCGAGGCTGGGCCCGCCTGGACCACAAGTTCGACCT
 GATGATGCCAAGAGGGGTTTGTGCACTGGTATGTGGGTGAGGGCATGGAGGAGGTGAGTTCTCCGAG
 GCCCGTAGGATATGGCTGCCCTGGAGAAGGATTATGAGGAGGTGGGCATCGACTCCTATGAGGACGAGG
 ATGAGGGAGAAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG200746 representing NM_006000
 Red=Cloning site Green=Tags(s)

MRECISVHVQAGVQMGNAWEL YCLEHGIQPDGQMP SDKTI GGGD SFTTFFCETGAGKHVPRAVFDL
 EPTVIDEIRNGPYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDPVLDRIRKLS DQCTGLQGFLVFHS
 FGGGTGSGFTSLLMERLSVDYGGKSKLEFSIYPAPQVSTAVVEPYNSILTHTTLEHSDCAFMDNEAIY
 DICRRNLDIERPTYTNLNRLLISQIVSSITASLRFDGALNVDL TEFQTNLVPYPRIFPLATYAPVISA EK
 AYHEQLSVAEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIAAIKTKRSIQFVDWCPTG
 FKVGINYQPPTVVPGGDLAKVQRAVCMLSNNTTAIAEAWARLDHKFDL MYAKRAV VHWYVGEEMEEGEFSE
 AREDMAALEKDYEEV GIDS YEDEDEGEE

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_006000

ORF Size: 1344 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_006000.3](#)

RefSeq Size: 1514 bp

RefSeq ORF: 1347 bp

Locus ID: 7277

UniProt ID: [P68366](#)

Cytogenetics: 2q35

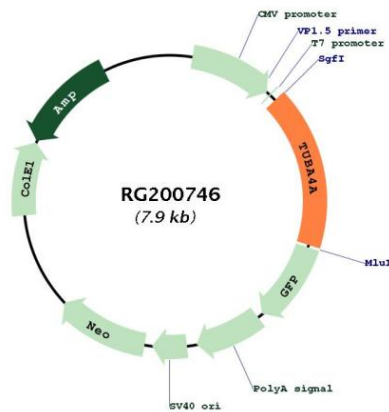
Domains: tubulin

Protein Families: Druggable Genome

Protein Pathways: Gap junction, Pathogenic Escherichia coli infection

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]

Product images:



Circular map for RG200746