

Product datasheet for **RG204072**

alpha Tubulin (TUBA3C) (NM_079836) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	alpha Tubulin (TUBA3C) (NM_079836) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	alpha Tubulin
Synonyms:	bA408E5.3; TUBA2; tubulin, alpha 2; tubulin, alpha 3c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204072 representing NM_079836 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGTGAGTGTATCTCTATCCACGTGGGGCAGGCAGGAGTCCAGATCGGCAATGCCTGCTGGAACTGT
ACTGCCTGGAACATGGAATTCAGCCCGATGGTCAGATGCCAAGTGATAAAAACCATTGGTGGTGGGGACGA
CTCCTTCAACACGTTCTTCAGTGAGACTGGAGCTGGCAAGCACGTGCCAGAGCAGTGTTTGTGGACCTG
GAGCCCACTGTGGTCGATGAAGTGCACAGGAACCTATAGGCAGCTCTCCACCCAGAGCAGCTGATCA
CCGGAAGGAAGATGCGCCAATAATTACGCCAGAGGCCATTACACCATCGCAAGGAGATCGTCGACCT
GGTCTGGACCGATCCGCAAATGGCGGATCTGTGCACGGGACTGCAGGGCTTCCCTCATCTCCACAGT
TTTGGGGTGGCACTGGCTCTGGTTCCGATCTCTGCTCATGGAGCGGCTCTCAGTGGATTACGGCAAGA
AGTCCAAGCTAGAATTTGCCATTTACCCAGCCCCCAGGTCTCCACGGCCGTGGTGGAGCCCTACAACCTC
CATCTGACCACCCACACGACCTGGAACATTCTGACTGTGCCTTCATGGTCGACAATGAAGCCATCTAT
GACATATGTCGGCGCAACCTGGACATCGAGCGTCCACGTACACCAACCTCAATCGCCTGATTGGGCAGA
TCGTGTCTCCATCACGGCTCCCTGCGATTTGACGGGGCCCTGAATGTGGACTTGACGGAATCCAGAC
CAACCTAGTGCCGTACCCCGCATCCACTTCCCCTGGCCACCTACGCCCCGGTCACTCAGCCGAGAAG
GCCTACCAGCAGCAGCTGTCGGTGGCTGAGATCACCAATGCCTGCTTCGAGCCAGCAATCAGATGGTCA
AGTGTGACCCTCGCCACGGCAAGTACATGGCCTGCTGCATGTTGTACAGGGGGATGTGGTCCCGAAAGA
TGTC AACGCGGCCATCGCCACCATCAAGACCAAGCGCACCATCCAGTTTGTAGATTGGTGCCAACTGGA
TTTAAGGTGGCATTAACTACCAGCCCCCAGCGTGGTCCCTGGGGGAGACCTGGCAAGGTGCAGCGGG
CTGTGTGCATGCTGAGCAACACCACGGCCATCGCGGAGGCCTGGGCTCGCTGGACCTGGCAGCTCTGGA
GAAGGATTATGAAGAGGTGGCGTGATTCCGTGGAAGCCGAGGCTGAAGAAGGTGAAGAATAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204072 representing NM_079836
 Red=Cloning site Green=Tags(s)

MRECISIHVQGAGVQIGNACWELYLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDL
 EPTVVDEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIVDLVLDRIKRLADLCTGLQGFLIFHS
 FGGGTGSGFASLLMERLSVDYGGKSKLEFAIYPAPQVSTAVVEPYNSILTHTTLEHSDCAFMDNEAIY
 DICRRNLDIERPTYTNLNLRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISA
 EKAYHEQLSVAEITNACFEPANQMKCDPRHGKYMCCMLYRGDVVPKDVAIAIATIKTKRTIQFVDWCPTG
 FKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAIAEAWARLDLAALEKDYEEVGVDSVEAEAEEGEEY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_079836

ORF Size: 1254 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_079836.1](#), [NP_524575.1](#)

RefSeq Size: 1408 bp

RefSeq ORF: 1256 bp

Locus ID: 7278

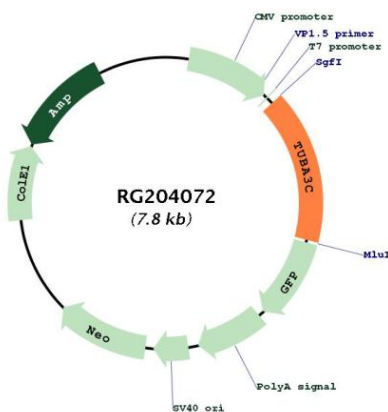
Cytogenetics: 13q12.11

Protein Families: Druggable Genome, Stem cell - Pluripotency

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 is an alpha tubulin gene that encodes a protein 99% identical to the mouse testis-specific Tuba3 and Tuba7 gene products. This gene is located in the 13q11 region, which is associated with the genetic diseases Clouston hidrotic ectodermal dysplasia and Kabuki syndrome. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG204072