

Product datasheet for **RC209279**

TUBA3E (NM_207312) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TUBA3E (NM_207312) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TUBA3E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC209279 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGCGAGTGTATCTCTATCCACGTGGGGCAGCGGGTGTCCAGATCGGCAATGCCTGCTGGAACTGT
 ACTGCCTTGAACATGGAATTCAGCCCGATGGTCAAATGCCAAGTGATAAAACCATTGGTGGCGGGGACGA
 CTCTTCAACACGTTCTTCAGTGAGACTGGAGCTGGCAAGCACGTGCCAGAGCAGTGTTTGTGGACCTG
 GAGCCACTGTGGTCGATGAAGTGCACACAGGGACCTACAGGCAGCTCTCCACCAGAGCAGCTGATCA
 CCGGGAAGGAAGATGCAGCCAGTAATTACGCCAGGGGCCATTACACCATCGGCAAGGAGATTGTTGACCT
 AGTCTGGACCGGATCCGCAAACCTGGCGGATCTGTGCACAGGACTGCAGGGCTTCTCATCTTCCACAGC
 TTTGGGGCGGCACTGGCTCTGGGTTTCGCATCTCTGCTCATGGAGCGGCTCTCAGTGGATTACAGCAAGA
 AGTCCAAGCTAGAGTTTGCCATTTACCCAGCCCCCAGGTCTCCACAGCCGTGGTGGAGCCCTACAACCT
 CATCTAACCCACACGACCCTGGAACATTCTGACTGTGCCTTCATGGTCGACAATGAAGCCATCTAT
 GACATATGTCGGCGCAACCTGGACATTGAACGTCCCACGTACACCAACCTCAATCGCCTGATTGGGCAGA
 TCGTGTCTCCATCACGGCTCCCTGCGATTTGATGGGGCCCTGAATGTGGACTTGACGGAATCCAGAC
 CAACCTCGTGCCGTACCCCGCATCCACTTCCCCTGGCCACCTACGCCCCAGTCATCTCAGCTGAGAAG
 GCCTACCATGAGCAGCTGTCTGTGGCTGAGATCAACATGCCTGCTTCGAGCCAGCCAATCAGATGGTCA
 AGTGTGACCCCTCGCCATGGCAAGTACATGGCCTGCTGCATGTTGTACAGGGGGGACGTGGTCCCCAAGA
 CGTCAATGCGGCCATCGCCACCATCAAGACCAAGCGCACTATCCAGTTTGTGGATTGGTGGCCGACTGGA
 TTTAAGGTGGGCATTAACCTACCAGCCCCCACAGTGGTCCCCGGGGGAGACCTGGCCAAGGTGCAGCGGG
 CCGTGTGCATGCTGAGCAACACCACGGCATTGCGGAGGCTGGGCCCGCCTGGTCCATAAGTTTCGATCT
 CATGTATGCCAAGTGGGCCTTTGTGCACTGGTACGTGGGCGAAGGCATGGAAGAGGGAGAGTTCTCTGAG
 GCCCGCAGGACCTGGCAGCTCTAGAGAAGGATTGTGAAGAGGTGGGCGTGGATTCCGTGGAAGCTGAGG
 CTGAAGAAGGCGAAGAATAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209279 protein sequence
 Red=Cloning site Green=Tags(s)

MRECI SIHVQAGVQIGNACWEL YCLEHGIQPDGQMP SDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDL
 EPTVVDEVRTGT YRQLFHPEQLITGKED AASNYARGHYTIGKEIVDLVLDRIKRLADLCTGLQGFLIFHS
 FGGGTGSGFASLLMERLSVDYSKSKLEFAIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMDNEAIY
 DICRRNLDIERPTYTNLNLIGQIVSSITASLRFDGALNVDL TEFQTNLVPYPRIHFPLATYAPVISA EK
 AYHEQLSVAEITNACFEPANQMVKCDPRHGKYMCCMLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTG
 FKVGINYQPPTVVPGGDLAKVQRAVCMLSNNTTAIAEAWARLVHKFDLMYAKWAFVHWYVGEEMEEGEFSE
 AREDLAAL EKDC EEVGVDSVEAEAE EEEY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6345_d11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_207312

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.

RefSeq: [NM_207312.1](#), [NP_997195.1](#)
RefSeq Size: 1554 bp

RefSeq ORF: 1353 bp

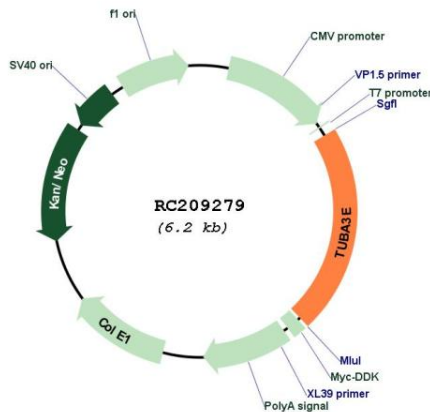
Locus ID: 112714

UniProt ID: [Q6PEY2](#)

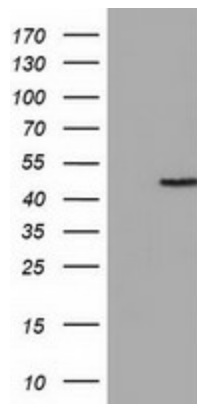
Cytogenetics: 2q21.1
Protein Families: Druggable Genome
Protein Pathways: Gap junction, Pathogenic Escherichia coli infection
MW: 49.9 kDa

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. This gene encodes an alpha tubulin that highly conserved among species. A missense mutation in this gene has been potentially linked to microlissencephaly and global developmental delay. [provided by RefSeq, Jul 2016]

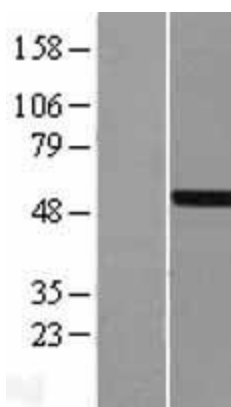
Product images:



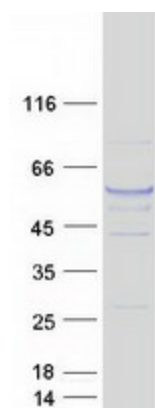
Circular map for RC209279



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TUBA3E (Cat# RC209279, 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-TUBA3E(Cat# [TA501595]). Positive lysates [LY404091] (100ug) and [LC404091] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY404091]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209279 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TUBA3E protein (Cat# [TP309279]). The protein was produced from HEK293T cells transfected with TUBA3E cDNA clone (Cat# RC209279) using MegaTran 2.0 (Cat# [TT210002]).