

## Product datasheet for RC202032

### TBCA (NM\_004607) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids

**Tag:** Myc-DDK

**Symbol:** TBCA

**Mammalian Cell Selection:** Neomycin

**Vector:** pCMV6-Entry (PS100001)

**E. coli Selection:** Kanamycin (25 ug/mL)

**ORF Nucleotide Sequence:** >RC202032 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCCGATCCTCGCGTGAGACAGATCAAGATCAAGACCGCGTGGTGAAGCGGTTGGTCAAAGAAAAAG  
TGATGTATGAAAAAGAGGCAAAACAAGAAGAAAGATTGAAAAATGAGAGCTGAAGACGGTGAAAA  
TTATGACATTAAAAAGCAGGCAGAGATCCTACAAGAAATCCAGGATGATGATCCCAGATTGCCAGCGCAGG  
TTGGAAGCCGCATATTTGGATCTTCAACGGATACTAGAAAATGAAAAAGACTTGAAGAAGCTGAGGAAT  
ATAAAGAAGCACGTTTAGTACTGGATTCAGTGAAGTTAGAAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202032 protein sequence  
Red=Cloning site Green=Tags(s)

MADPRVRQIKIKTGIVKRLVKEKVMYEKEAKQQEEKIEKMRAEDGENYDIKKQAEILQESRMMIPDCQRR  
LEAAYLDLQRILENEKDLEEAEYKEARLVLDVSKLEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6304\\_e04.zip](https://cdn.origene.com/chromatograms/mk6304_e04.zip)

**Restriction Sites:** SgfI-MluI



## Cloning Scheme:



ACCN: NM\_004607

ORF Size: 324 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_004607.3](#)  
 RefSeq Size: 679 bp  
 RefSeq ORF: 327 bp  
 Locus ID: 6902  
 UniProt ID: [O75347](#)

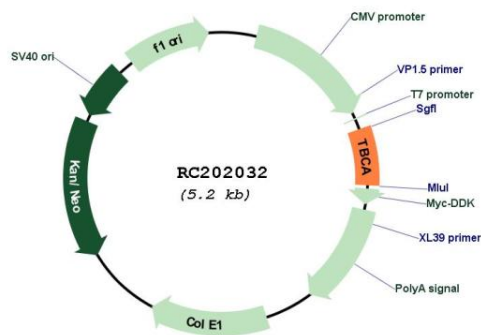
Cytogenetics: 5q14.1

Domains: TBCA

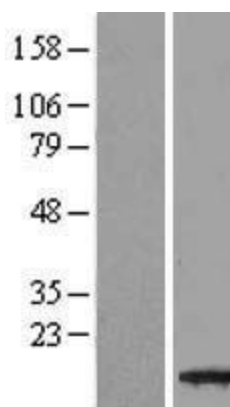
MW: 12.9 kDa

**Gene Summary:** The product of this gene is one of four proteins (cofactors A, D, E, and C) involved in the pathway leading to correctly folded beta-tubulin from folding intermediates. Cofactors A and D are believed to play a role in capturing and stabilizing beta-tubulin intermediates in a quasi-native confirmation. Cofactor E binds to the cofactor D/beta-tubulin complex; interaction with cofactor C then causes the release of beta-tubulin polypeptides that are committed to the native state. This gene encodes chaperonin cofactor A. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]

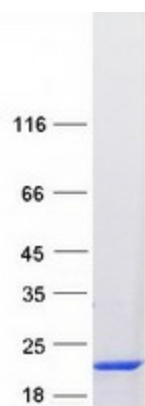
## Product images:



Circular map for RC202032



Western blot validation of overexpression lysate (Cat# [LY417869]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202032 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TBCA protein (Cat# [TP302032]). The protein was produced from HEK293T cells transfected with TBCA cDNA clone (Cat# RC202032) using MegaTran 2.0 (Cat# [TT210002]).