

Product datasheet for RC206177

KCTD21 (NM_001029859) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KCTD21 (NM_001029859) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: KCTD21
Synonyms: KCASH2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC206177 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCGACCCCATCACGCTGAACGTCGGGGGAAGCTCTATACAACCTCACTGGCGACCCTGACCAGCT
 TCCCTGACTCCATGCTAGGCGCCATGTTCCAGCGGAAGATGCCACCAAGAGGGACAGCCAGGGCAACTG
 CTTCAATTGACCGTACGGCAAAGTGTCCGCTATATCCTCAACTTCTGCGGACCTCCACCTTGACCTG
 CCTGAGGACTTCCAGGAGATGGGCTGCTCCGACGGGAGGCCGACTTCTACCAGGTGCAGCCCTGATTG
 AGGCCCTGCAGGAGAAGGAAGTGGAGCTCTCAAGGCCGAGAAGAATGCCATGCTCAACATCACACTGAA
 CCAGCGTGTGCAGACGGTCCACTTCACTGTGCGGAGGCCACCCAGATCTACAGCCTCTCCTCTCCAGC
 ATGGAGGTCTTCAACGCCAACATCTTCAGCACCTCCTGCCTCTTCTCAAGCTCCTTGGCTCAAGCTCT
 TCTACTGCTCCAATGGCAATCTCTCCTCCATCACCAGCCACTTGCAGGACCCCAACCACCTGACTCTGGA
 CTGGGTGGCCAATGTGGAGGGCCTGCCAGAGGAGGAGTACACCAAGCAGAACCTCAAGAGGCTCTGGGTG
 GTGCCCGCCAACAAGCAGATCAACAGCTTCCAGGTCTTCGTGGAAGAGGTAAGTAAATCGCTCTGAGCG
 ATGGCTTCTGCATCGATTCTTCTACCCACATGCTCTGGATTTATGAACAATAAGATTATTCGATTAAT
 ACGGTACAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC206177 protein sequence
 Red=Cloning site Green=Tags(s)

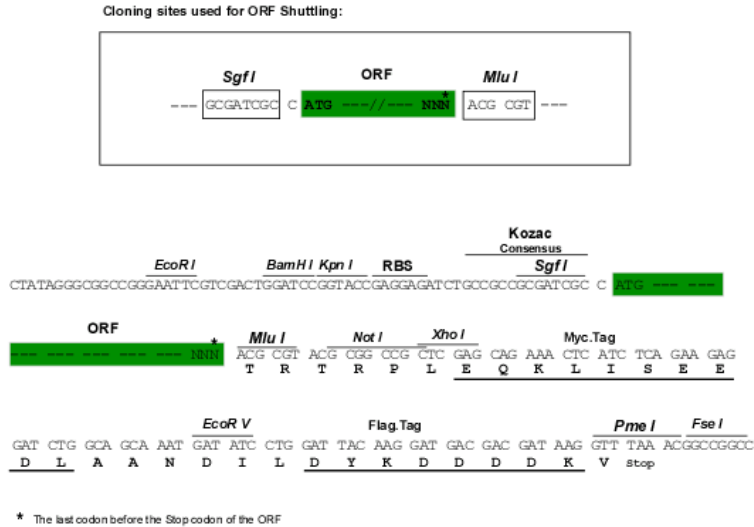
```
MSDPITLNVGGKLYTTSLATLTSFPDSMLGAMFSGKMPTKRDSQGNCFIDRDGKVFRIYILNFLRTSHLDL
PEDFQEMGLLRREADFYQVQPLIEALQEKEVELSKAEKNAMLNITLNQRVQTVHFVREAPQIYSLSSSS
MEVFNANIFSTSCFLKLLGSKLFYCSNGNLSSITSHLQDPNHLTLDWVANVEGLPEEEYTKQLKRLWV
VPANKQINSFQVFVEEVKIALSDGFCDSSHPHALDFMNNKIIRLIRYR
```

TRTRP**L**EQ**L**ISEED**L**A**A**ND**I**L**D**Y**K**DDDD**K**V

Chromatograms: https://cdn.origene.com/chromatograms/mk6765_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001029859

ORF Size: 780 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_001029859.3](#)

RefSeq Size: 3396 bp

RefSeq ORF: 783 bp

Locus ID: 283219

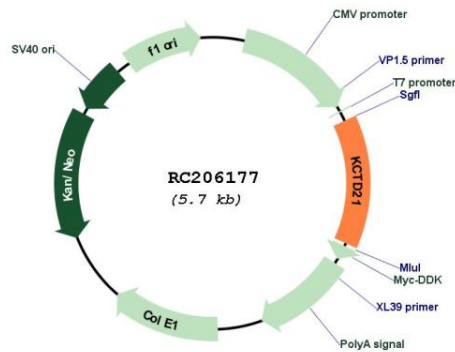
UniProt ID: [Q4G0X4](#)

Cytogenetics: 11q14.1

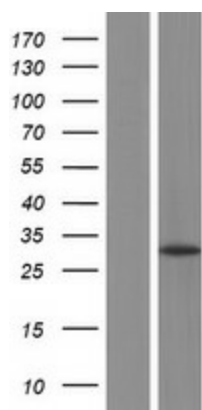
MW: 29.6 kDa

Gene Summary: Probable substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex mediating the ubiquitination and subsequent proteasomal degradation of target proteins. Promotes the ubiquitination of HDAC1. Can function as antagonist of the Hedgehog pathway by affecting the nuclear transfer of transcription factor GLI1; the function probably occurs via HDAC1 down-regulation, keeping GLI1 acetylated and inactive. Inhibits cell growth and tumorigenicity of medulloblastoma (MDB) (PubMed:21472142).[UniProtKB/Swiss-Prot Function]

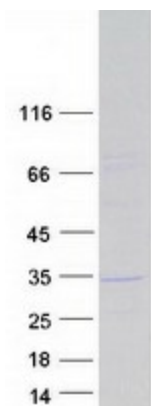
Product images:



Circular map for RC206177



Western blot validation of overexpression lysate (Cat# [LY422476]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206177 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KCTD21 protein (Cat# [TP306177]). The protein was produced from HEK293T cells transfected with KCTD21 cDNA clone (Cat# RC206177) using MegaTran 2.0 (Cat# [TT210002]).