

Product datasheet for **RC225297**

KCTD6 (NM_001128214) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KCTD6 (NM_001128214) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: KCTD6
Synonyms: KCASH3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC225297 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATAATGGAGACTGGGGCTATATGATGACTGACCCAGTCACATTAATGTAGGTGGACACTTGTATA
CAACGTCTCTCACCACATTGACGCGTTACCCGGATTCCATGCTTGGAGCTATGTTTGGGGGGACTTCCC
CACAGCTCGAGACCCTCAAGGCAATTACTTTATTGATCGAGATGGACCTTTTTCCGATATGTCCTCAAC
TTCTTAAGAACTCAGAATTGACCTTACCGTTGGATTTAAGGAATTTGATCTGCTTCGAAAGAAGCAG
ATTTTTACCAGATTGAGCCCTTGATTTCAGTGTCTCAATGATCCTAAGCCTTTGTATCCCATGGATACTTT
TGAAGAAGTTGTGGAGCTGTCTAGTACTCGGAAGCTTTCTAAGTACTCCAACCCAGTGGCTGTCATCATA
ACGCAACTAACCATCACCCTAAGGTCCATTCTTACTAGAAGGCATCTCAAATTTTTACCAAGTGGAA
ATAAGCACATGATGGACACCAGAGACTGCCAGGTTTCTTTACTTTTGGACCCTGTGATTATCACCAGGA
AGTTTTCTTTAGGGTCCACCTGATGGAATACATTACAAAACAAGGTTTCACGATCCGCAACCCGGGTG
CATCACATGAGTGAGCGGGCCAATGAAAACACAGTGGAGCACAACCTGGACTTTCTGTAGGCTAGCCCGGA
AGACAGACGAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC225297 protein sequence
Red=Cloning site Green=Tags(s)

MDNGDWGYMMTDPVTLNVGGHLYTTSLTTLTRYPDSMLGAMFGGDFPTARDPQGNFYIDRDGPLFRYVLN
 FLRTSELTLPLDFKEFDLLRKEADFYQIEPLIQCLNDPKPLYPMDTFEEVVELSSSTRKLSKYSNPVAVII
 TQLTITTKVHSLLEGISNYFTKWNKHMMMDTRDCQVSFTFGPCDYHQEVSLRVHLMYIITKQGFTIRNTRV
 HHMSERANENTVEHNWTFCLARKTDD

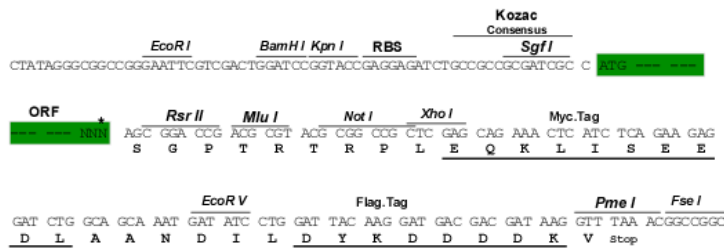
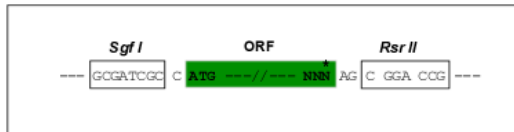
SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6615_c12.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001128214

ORF Size: 711 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_001128214.2](#)

RefSeq Size: 1566 bp

RefSeq ORF: 714 bp

Locus ID: 200845

UniProt ID: [Q8NC69](#)

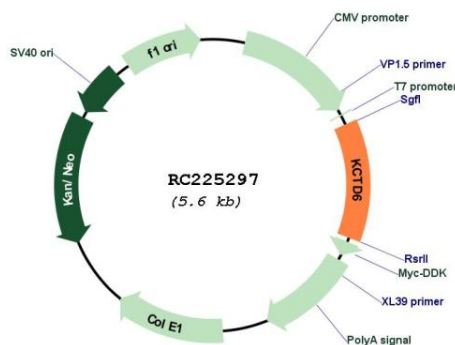
Cytogenetics: 3p14.3

Protein Families: Ion Channels: Other

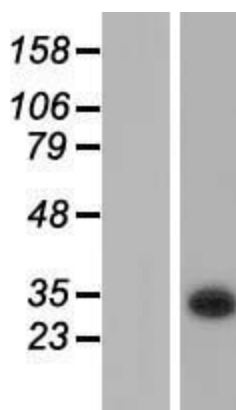
MW: 27.6 kDa

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; the function seems to depend on KCTD11:KCTD6 oligomerization. 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). Involved in regulating protein levels of ANK1 isoform Mu17 probably implicating CUL3-dependent proteasomal degradation (PubMed:22573887).[UniProtKB/Swiss-Prot Function]

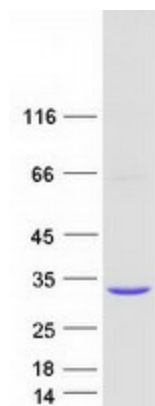
Product images:



Circular map for RC225297



Western blot validation of overexpression lysate (Cat# [LY426928]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225297 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KCTD6 protein (Cat# [TP325297]). The protein was produced from HEK293T cells transfected with KCTD6 cDNA clone (Cat# RC225297) using MegaTran 2.0 (Cat# [TT210002]).