

## Product datasheet for **RC224546**

### KRTAP19-4 (NM\_181610) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids

**Tag:** Myc-DDK

**Symbol:** KRTAP19-4

**Synonyms:** KAP19.4

**Mammalian Cell Selection:** Neomycin

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

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

**ORF Nucleotide Sequence:** >RC224546 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAGCTACTATGGCAGCTATTACAGAGGCCTGGGCTATGGCTGTGGAGGCTTTGGTGGCCTAGGCTATG  
GCTATGGCTGTGGATGTGGCAGCTTCCGAGACTGGGTTATGGCTGTGGCTTTGGAGGCAACGGATATGG  
CTGCTGCCGCCCATCATGCTATGGAGGATATGGATTCTCAATTCTACTGAAATCCTACCCTGAGGACACG  
ATATCAGAGGTCATAAGAAGATCATTCAATTTAACCAATAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC224546 protein sequence  
Red=Cloning site Green=Tags(s)

MSYYGSYYRGLGYGCGFGGLGYGYGCGGSFRRLGYGCGFGGNGYGCCRPSCYGGYGFSILLKSYPEDT  
ISEVIRRSFNLTKY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6463\\_b02.zip](https://cdn.origene.com/chromatograms/mk6463_b02.zip)

**Restriction Sites:** SgfI-MluI



## Cloning Scheme:



ACCN: NM\_181610

ORF Size: 252 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\_181610.1, NP\_853641.1

RefSeq Size: 255 bp

RefSeq ORF: 255 bp

Locus ID: 337971

UniProt ID: Q3LI73

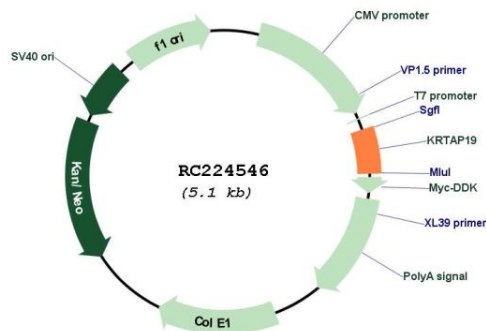
Cytogenetics: 21q22.11

Protein Families: Transmembrane

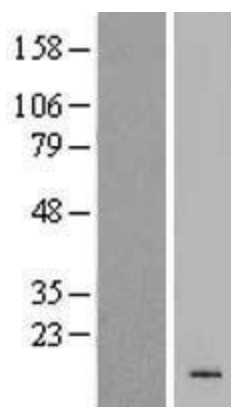
MW: 9 kDa

**Gene Summary:** In the hair cortex, hair keratin intermediate filaments are embedded in an interfilamentous matrix, consisting of hair keratin-associated proteins (KRTAP), which are essential for the formation of a rigid and resistant hair shaft through their extensive disulfide bond cross-linking with abundant cysteine residues of hair keratins. The matrix proteins include the high-sulfur and high-glycine-tyrosine keratins.[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RC224546



Western blot validation of overexpression lysate (Cat# [LY405720]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224546 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).