

Product datasheet for **RG215483**

KRTAPI0-6 (NM_198688) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	KRTAPI0-6
Synonyms:	KAPI0.6; KAPI8.6; KRTAPI8-6; KRTAPI8.6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG215483 ORF sequence, **codon optimized**.
Due to the complexity of NM_198688, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCTAGCACTATGTCCGTCTGTTCTTCAGACCTGTCTTACGGATCTAGGGTTGCCTTCCTGGTA
GTTGTGATAGCTGTTCTGACAGTTGGCAGGTGGACGACTGCCCTGAGAGTTGCTGTGAACCTCCGTGCTG
CGCGCCCGCCCTTGCCCTTTCTTTGGTATGTACCCCGTCTCCCGGTGTCTAGTCCATGCTGTCCCGTG
ACCTGTGAGCCCTCCCATGCCAGAGTGGCTGCACTAGCTCATGCCCCCGAGCTGCTGTGACGAATCAA
GTTGTGACGTGGCCTGTTGTGCCTCTCCCGTGTCAACAGGCCTGTTGCGTGCCCGTGTGTGCAAAAC
TGTTTGCTGCAAGCCCGTGTGCTGTGTGAGCGTGTGCTGCGGAGATTCTCATGTTGCCAACAATCCAGC
TGTCATCAGCATGTTGCACCTCTTCTCCATGTCAACAGGCATGCTGTGTGCCAGTGTGTTGCAAACTG
TATGTTCCGGCATTAGTAGCAGCTGCTGTGACGAGTCATCCTGTGTGAGCTGTGTGAGTTCTCCGTGCTG
CCAGGCTGTGTGCAACCTCACCTGCCAGAGCGGTTGTACATCCTCATGTACCCCTCCTGCTGTGAG
CAGTCCAGTTGTGACGCAACCTGCTGCACTAGTTACCTTGTCAACAGGCCTGCTGCGTACCCGTTTGT
GTGTGCCAGTCTGTGCGTCCCTACTTGTAGCGAGGACTCTTCTCTTGTGTCAACAATCTCCTGCCA
GCCCCGCTGCTGTACATCCAGCCCTGCCAGCATGCTTGTGCGTGCCCGTCTGTAGTGGGGCTCCACC
TCTTGTGTCAACAAAGCTCTTGTGAGCCAGCTTGTGCACGGCGAGCTGTTGCAGATCATCTCAAGCG
TGAGCCTGCTGTGTACCCCGTATGCAAGAGTACATGTTGCGTGCCCGTGCCCTCTTGCGGGGCAAGTGC
CTCATCATGCCAACCATCTTGTGCGGAGTGTAGTTGTGTTCCCTGCTGTGTAGGCCCATGTGCTCT
CGCCCCGCGTGTTACTCTCTCTGTTAGGGCAGAAGTCATCATGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG215483 representing NM_198688
Red=Cloning site Green=Tags(s)

MAASTMSVCSSDLSYGSRVCLPGSCDSCSDSWQVDDCPESCCEPPCCAPAPCLSLVCTPVSRVSSPCCPV
TCEPSPCQSGCTSSCTPSCCQSSCQLACCASSPCQQACCVPVCKTVCKPVCCVSVCCGSSCCQSS
CQSACCTSSPCQQACCVPVCKPVCSGISSSCCQSSCVSVSPCCQAVCEPSPCQSGCTSSCTPSCCQ
QSSCQPTCCTSSPCQQACCVPVCCVPVCCVPTCSEDSSCCQSSCQPACCTSSPCQHACCVPVCSGAST
SCCQSSCQPACCTASCCRSSSVSLLCHPVCKSTCCVPVPSGASASSCQPSCCRTASCVSLLCRPMCS
RPACYSLCSGQKSSC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_198688

ORF Size: 1095 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_198688.1](#), [NP_941961.1](#)

RefSeq Size: 1238 bp

RefSeq ORF: 1098 bp

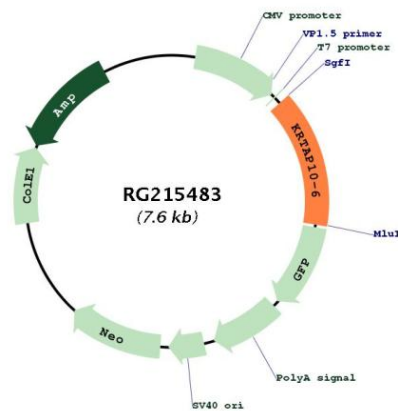
Locus ID: 386674

UniProt ID: [P60371](#)

Cytogenetics: 21q22.3

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 RG215483