

Product datasheet for **RC228119**

KRTAP4-8 (NM_031960) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KRTAP4-8 (NM_031960) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KRTAP4-8
Synonyms:	KAP4.8; KRTAP4.8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228119 ORF sequence, codon optimized. Due to the complexity of NM_031960, 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**CGATCGC**

ATGGTGAATAGTTGTTGCGGGTCCGTGTGCAGCGATCAGGGTTGTGGCCAGGATCTCTGCCAGGAAACCT
GCTGCTGCCCTTCCTGCTGTGCAGACCACCTGTTGCAGAACCAACCTGCTACCGGCCGAGTTATTCAGTCAG
TTGCTGCTGTAGACCACAATGTTGCCAGAGCGTTTGTGTGCAGCAACATGTTGCAGACCCCTCTTCTGT
GTGTATCCTGCTGTAAGCCACAATGTTGCCAGAGCGTCTGCTGTGCAGCCTACCTGCTGTACCCTAGCT
GCTGCATATCAAGTTGCTGTGCGCCTAGTTGTTGCGTGTATCCTGTTGTAAACCTCAGTGTGTGTCAGTC
CGTATGTTGCCAGCCCAATTGTTGCCGGCCAAGCTGCAGTATTAGTAGTTGTTGCAGACCCAGCTGCTGC
GAGTCTTCCTGTTGCCGCCCTGTTGTTGCCTTAGACCTGTGTGCGGACGAGTCAGTTGTCATACGACAT
GTTATAGACCTGCATGCGTGATTAGCACCTGTCCGAGGCCTGTTTGTGCGCGTCCCTCTGTTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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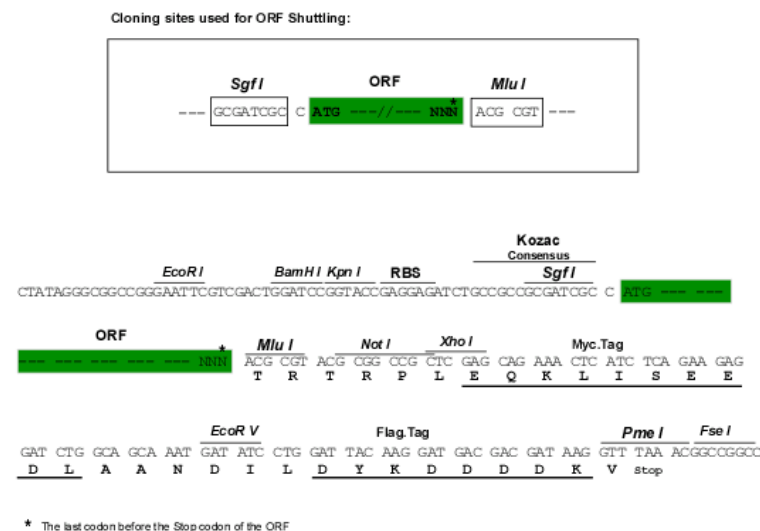
Protein Sequence: >RC228119 representing NM_031960
 Red=Cloning site Green=Tags(s)

MVNSCCGSGVCSDDQCGGQDLCEETCCCPSCCQTTCRRTTCYRPSYSVSCCCRPQCCQSVCCQPTCCRPSCC
 VSSCKPQCCQSVCCQPTCCHPSCCISCCRPSCCVSSCKPQCCQSVCCQPNCCRPSCSISCCRPSCC
 ESSCRPCCCLRPVCGRVSCHTTCYRPACVISTCPRPVCCASSCC

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM 031960

ORF Size: 555 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.

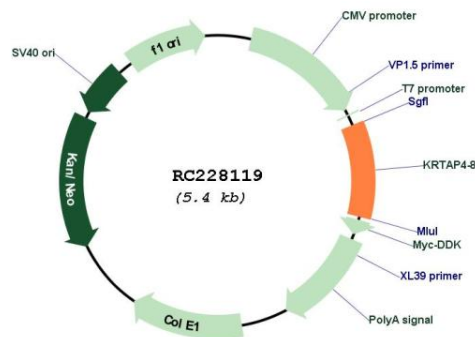
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_031960.1 , NM_031960.2 , NP_114166.1
RefSeq Size:	1143 bp
RefSeq ORF:	558 bp
Locus ID:	728224
UniProt ID:	Q9BYQ9
Cytogenetics:	17q21.2
MW:	19.6 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 RC228119