

Product datasheet for **RG200897**

KRTAP4-12 (NM_031854) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	KRTAP4-12
Synonyms:	KAP4.12; KRTAP4.12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG200897 ORF sequence, **codon optimized**.
Due to the complexity of NM_031854, 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**CGCATCGC**

ATGGTAAATAGCTGCTGTGGGTCACTTTGTCCGATCAGGGGTGCGGACTCGAGAATTGCTGTAGGCCAA
GCTGTTGCCAAACAACGTGTTGTGCGACGACTTGTGCAGACCTTCTTGCTGCGTGAGCAGCTGCTGTCG
CCCCAGTGTTGCCAGTCCGTTTGTGCCAGCCACATGCTGCCGGCCTAGCTGCTGCCAGACCACATGT
TGCAGGACAACGTGCTGCAGACCCTCATGTTGTGTGAGTTCATGCTGCAGACCACAATGTTGCCAGAGTG
TCTGTTGTACGCCCTACATGTTGTGCGCCAGCTGCTGCCAAACCACTTGTGTAGAACAACCTGTTGCAG
ACCGTCATGTTGCGTCAGCAGCTGTTGCAGGCCACAGTGCTGCCAGTCTGTTTGTGTCAGCCGACCTGC
TGCCGGCCCTCCTGTTGATTTCAAGTTCCTGCTGCCCTCATGCTGTGAGAGTTCTGTTGTCGGCCTT
GTTGTTGTCTTAGGCCCGTCTGCGGGCGGTATCCTGTCACACTACCTGCTACCGCCGACTTGTGTGAT
CTCTACCTGTCCTCGCCCTCTCTGCTGTGCTAGCAGCTGTTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



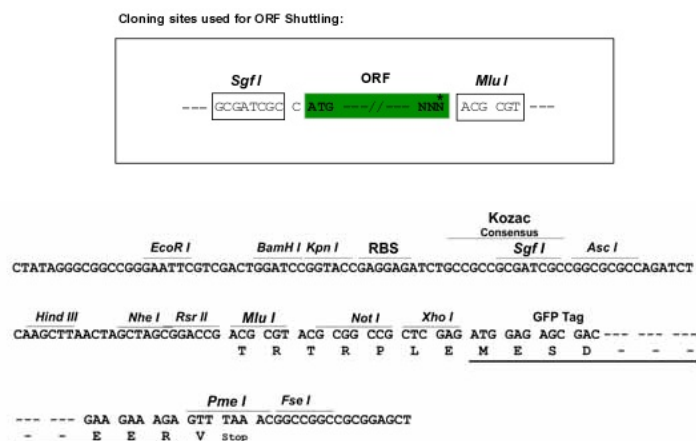
Protein Sequence: >RG200897 representing NM_031854
Red=Cloning site Green=Tags(s)

MNVNSCGSVCSQDQGLENCRCRPSCCQTTCRTTCCRPSCCVSSCRPQCCQSVCCQPTCCRPSCCQTTC
 CRTTCCRPSCCVSSCRPQCCQSVCCQPTCCRPSCCQTTCRTTCCRPSCCVSSCRPQCCQSVCCQPTC
 CRPSCCISSSCCPSCCESSCCRPPCCCLRPVCGRVSCHTTCYRPTCVISTCPRPLCCASSCC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031854

ORF Size: 603 bp

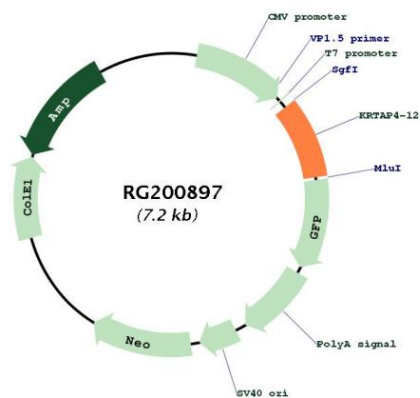
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_031854.2, NP_114060.1</u>
RefSeq Size:	1092 bp
RefSeq ORF:	606 bp
Locus ID:	83755
UniProt ID:	<u>Q9BQ66</u>
Cytogenetics:	17q21.2
Gene Summary:	This protein is a member of the keratin-associated protein (KAP) family. The KAP proteins form a matrix of keratin intermediate filaments which contribute to the structure of hair fibers. KAP family members appear to have unique, family-specific amino- and carboxyl-terminal regions and are subdivided into three multi-gene families according to amino acid composition: the high sulfur, the ultrahigh sulfur, and the high tyrosine/glycine KAPs. This protein is a member of the ultrahigh sulfur KAP family and the gene is localized to a cluster of KAPs at 17q12-q21. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG200897