

Product datasheet for RC216244

TAC1 (NM_013998) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TAC1 (NM_013998) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TAC1
Synonyms: Hs.2563; NK2; NKNA; NPK; TAC2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216244 representing NM_013998
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAATCCCTCGTGGCCTTGGCAGTCTTTTTCTGTCTCCACTCAGCTGTTGCAGAAGAAATAGGAG
 CCAATGATGATCTGAATTACTGGTCCGACTGGTACGACAGCGACCAGATCAAGGAGGAAGCTGCCGGAGCC
 CTTTGAGCATCTTCTGCAGAGAATCGCCCGGAGACCCAAGCCTCAGCAGTTCTTTGGATTAATGGGCAA
 CGGGATGCTGGACATGGCCAGATCTCTCACAAAATGGCTTATGAAAGGAGTGCAATGCAGAATTATGAA
 GAAGACGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216244 representing NM_013998
 Red=Cloning site Green=Tags(s)

MKILVALAVFFLVSTQLFAEEIGANDDLNYWSDWYDSDQIKEELPEPFEHLLQRIARRPKPQQFFGLMGK
 RDAGHGQISHKMAYERSAMQNYERRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6488_a12.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:



ACCN: NM_013998

ORF Size: 288 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_013998.3](#)

RefSeq Size: 1003 bp

RefSeq ORF: 291 bp

Locus ID: 6863

UniProt ID: [P20366](#)

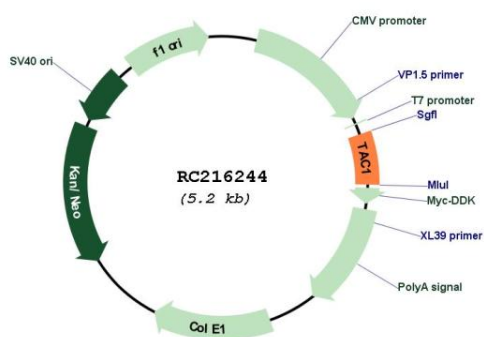
Cytogenetics: 7q21.3

Protein Families: Druggable Genome, Secreted Protein

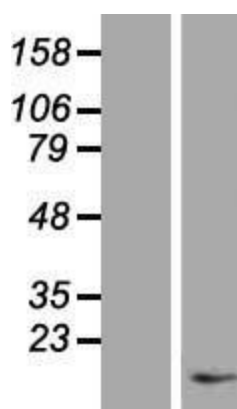
MW: 11.38 kDa

Gene Summary: This gene encodes four products of the tachykinin peptide hormone family, substance P and neurokinin A, as well as the related peptides, neuropeptide K and neuropeptide gamma. These hormones are thought to function as neurotransmitters which interact with nerve receptors and smooth muscle cells. They are known to induce behavioral responses and function as vasodilators and secretagogues. Substance P is an antimicrobial peptide with antibacterial and antifungal properties. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2014]

Product images:



Circular map for RC216244



Western blot validation of overexpression lysate (Cat# [LY415529]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216244 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).