

Product datasheet for **RC203236**

ANP (NPPA) (NM_006172) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ANP (NPPA) (NM_006172) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ANP
Synonyms: ANF; ANP; ATFB6; ATRST2; CDD; CDD-ANF; CDP; PND
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203236 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAGCTCCTTCTCCACCACCACCGTGAGCTTCTCCTTTTACTGGCATTCCAGCTCCTAGGTCAGACCA
GAGCTAATCCCATGTACAATGCCGTGTCCAACGCAGACCTGATGGATTTCAAGAATTTGCTGGACCATT
GGAAGAAAAGATGCCTTTAGAAGATGAGGTCGTGCCCCACAAGTGCTCAGTGAGCCGAATGAAGAAGCG
GGGGCTGCTCTCAGCCCCCTCCCTGAGGTGCCTCCCTGGACCGGGGAAGTCAGCCAGCCAGAGAGATG
GAGGTGCCCTCGGGCGGGCCCCCTGGGACTCCTCTGATCGATCTGCCCTCCTAAAAGCAAGCTGAGGGC
GCTGCTCACTGCCCTCGGAGCCTGCGGAGATCCAGCTGCTTCGGGGCAGGATGGACAGGATTGGAGCC
CAGAGCGGACTGGGCTGTAAACAGCTTCCGGTACCGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203236 protein sequence
Red=Cloning site Green=Tags(s)

MSSFSTTTVSFLLLLAFQLLGQTRANPMYNAVSNADLMDFKNLLDHLEEKMPLEDEVVPPQVLSPENEEA
GAALSPLPEVPPWTGEVSPAQRDGGALGRGPWSSDRSALLKSKLRALLTAPRSLRRSSFCGGRMDRIGA
QSLGNCNSFRYRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

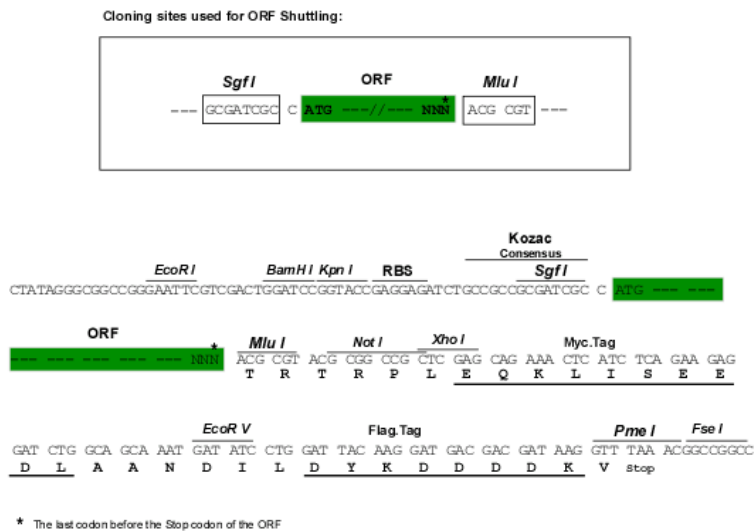
Chromatograms: https://cdn.origene.com/chromatograms/mk6145_e07.zip



[View online >](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006172

ORF Size: 459 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006172.4](#)

RefSeq Size: 858 bp

RefSeq ORF: 456 bp

Locus ID: 4878

UniProt ID: [P01160](#)

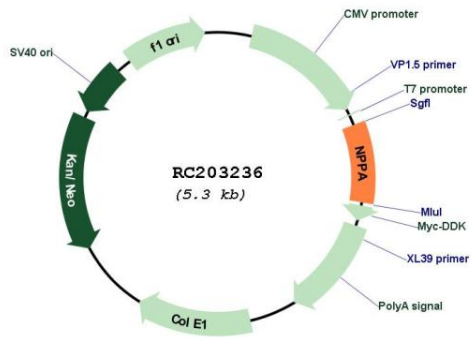
Cytogenetics: 1p36.22

Protein Families: Secreted Protein, Transmembrane

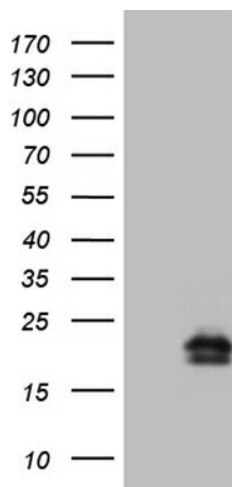
MW: 16.7 kDa

Gene Summary: The protein encoded by this gene belongs to the natriuretic peptide family. Natriuretic peptides are implicated in the control of extracellular fluid volume and electrolyte homeostasis. This protein is synthesized as a large precursor (containing a signal peptide), which is processed to release a peptide from the N-terminus with similarity to vasoactive peptide, cardiodilatin, and another peptide from the C-terminus with natriuretic-diuretic activity. Mutations in this gene have been associated with atrial fibrillation familial type 6. This gene is located adjacent to another member of the natriuretic family of peptides on chromosome 1. [provided by RefSeq, Oct 2015]

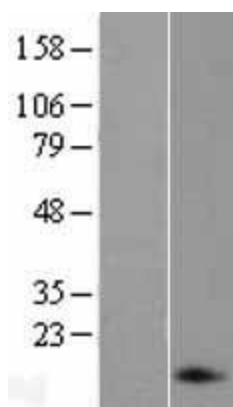
Product images:



Circular map for RC203236



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NPPA (Cat# RC203236, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NPPA (Cat# [TA809559])(1:2000). Positive lysates [LY401862] (100ug) and [LC401862] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401862]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203236 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).