

Product datasheet for RC231147

Aprataxin (APTX) (NM_001195250) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aprataxin (APTX) (NM_001195250) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aprataxin
Synonyms:	AOA; AOA1; AXA1; EAOH; EOAHA; FHA-HIT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC231147 representing NM_001195250 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTAACGTGAATTTGTCCGCTCCGACTTCTGGAGAGTGATGATGCGGGTGTGCTGGTTGGTGAGAC
AGGACAGCCGGCACCAGCGAATCAGACTTCCACATTTGGAAGCAGTTGTGATTGGGCGTGGCCAGAGAC
CAAGATCACTGATAAGAAATGTTCTCGACAGCAAGAGTTTGAGGAAGAGGCAAAGAACCCTGGCCTGGAA
ACACACAGGAAGAGAAAGAGATCAGGCAACAGTGATTCTATAGAAAGGGATGCTGCTCAGGAAGCTGAGG
CTGGGACAGGGCTGGAACCTGGGAGCAACTCTGGCCAATGCTCTGTGCCCTAAAGAAGGAAAAAGATGC
ACCTATCAAAAAGGAATCCCTGGGCCACTGGAGTCAAGGCTTGAAGATTTCTATGCAGGACCCCAAATG
CAGGTTTACAAAGATGAGCAGGTGGTGGTATAAAGGATAAATACCCAAAGGCCCGTTACCATTTGGCTGG
TCTTACCGTGGACCTCCATTTCCAGTCTGAAGGCTGTGGCCAGGGAACACCTTGAACCTCCTTAAGCATAT
GCACACTGTGGGGAAAAGGTGATTGTAGATTTTGGTGGTCCAGCAAACCTCCGCTTCCGATTGGGCTAC
CACGCCATTCCGAGTATGAGCCATGTACATCTTCATGTGATCAGCCAGGATTTTGATTCTCCTTGCCTTA
AAAACAAAAACATTGGAATCTTTCAATACAGAATACTCCTAGAATCACAAGCTGTGATCGAGATGGT
ACAAGAGGCTGGTAGAGTAACTGTCCGAGATGGGATGCCTGAGCTCTTGAAGCTGCCCTTCGTTGTGCAT
GAGTGCCAGCAGCTGCTGCCCTCCATTCCTCAGCTGAAAGAACATCTCAGGAAGCACTGGACACAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC231147 representing NM_001195250
Red=Cloning site Green=Tags(s)

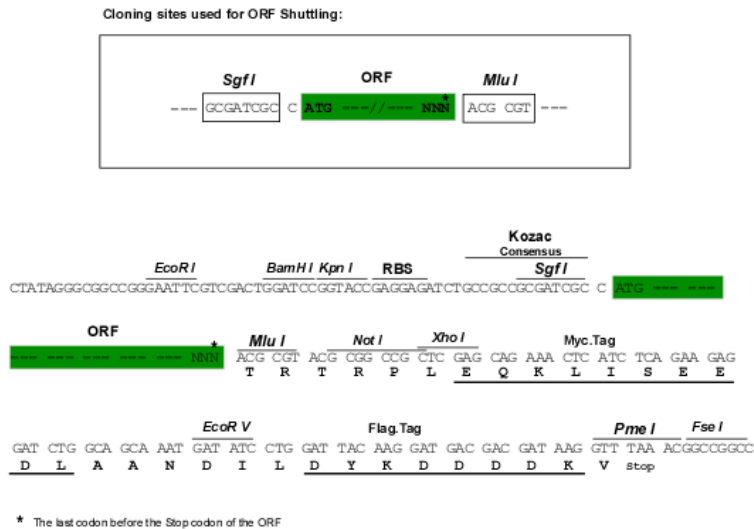
MSNVNLSVSDFWRVMMRVCWLVRQDSRHRIRLPHLEAVVIGRGPETKITDKKCSRQQEFEEEEAKNPGL
 THRKRKRSNGSNDIERDAAQAEAGTGLEPGSNGQCSVPLKKGKDAPIKKESLGHWSQGLKISMQDPKM
 QVYKDEQVVVVKDKYPKARYHWLVLPWTSISSLKAVAREHELLELLKHMHTVGEKVIYDFAGSSKLRFR
 LGYHAIPSMHSHVHLHVISQDFDSPCLKNKKHWNFSNTEYFLESQAVIEMVQEAGRVTVRDGMPELLK
 LPLRCH
 ECQQLLPSIPQLKEHLRKHWTQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8050_f10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001195250

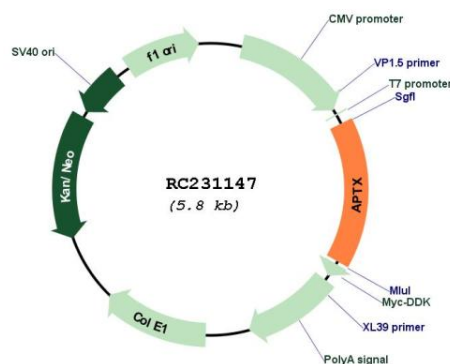
ORF Size: 906 bp

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.

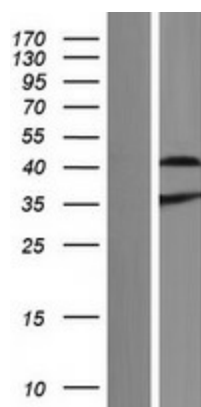
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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:	<u>NM_001195250.1</u> , <u>NP_001182179.1</u>
RefSeq ORF:	867 bp
Locus ID:	54840
UniProt ID:	<u>Q7Z2E3</u>
Cytogenetics:	9p21.1
Protein Families:	Druggable Genome
MW:	35.2 kDa
Gene Summary:	This gene encodes a member of the histidine triad (HIT) superfamily. The encoded protein may play a role in single-stranded DNA repair through its nucleotide-binding activity and its diadenosine polyphosphate hydrolase activity. Mutations in this gene have been associated with ataxia-ocular apraxia. Alternatively spliced transcript variants have been identified for this gene.[provided by RefSeq, Aug 2010]

Product images:



Circular map for RC231147



Western blot validation of overexpression lysate (Cat# [LY434146]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231147 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).