

## Product datasheet for **RC231131**

### Aprataxin (APTX) (NM\_001195254) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aprataxin (APTX) (NM_001195254) 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:	>RC231131 representing NM_001195254 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGCGGGTGTGCTGGTTGGTGAGACAGGACAGCCGGCACCAGCGAATCAGACTTCCACATTTGGAAG  
CAGTTGTGATTGGGCGTGGCCAGAGACCAAGATCACTGATAAGAAATGTTCTCGACAGCAAGAGTTTGA  
GGAAGAGGCAAAGAACCCTGGCCTGAAACACACAGGAAGAGAAAGAGATCAGGCAACAGTGATTCTATA  
GAAAGGGATGCTGCTCAGGAAGCTGAGGCTGGGACAGGGCTGGAACCTGGGAGCAACTCTGGCCAATGCT  
CTGTGCCCTAAAGAAGGAAAAGATGCACCTATCAAAAAGGAATCCCTGGGCCACTGGAGTCAAGGCTT  
GAAGATTTCTATGCAGGACCCCAAAATGCAGGTTTACAAAGATGAGCAGGTGGTGGTGATAAAGGATAAA  
TACCCAAAGGCCGTTACCATTGGCTGGTCTTACCGTGGACCTCCATTTCCAGTCTGAAGGCTGTGGCCA  
GGGAACACCTTGAACCTTAAGCATATGCACACTGTGGGGGAAAAGGTGATTGTAGATTTTGTGGGTC  
CAGCAACTCCGCTTCCGATTGGGCTACCACGCCATTCCGAGTATGAGCCATGTACATCTTCATGTGATC  
AGCCAGGATTTTATTCTCCTTGCCTTAAAAACAAAAACATTGGAATCTTTCAATACAGAATACTTCC  
TAGAATCACAAGCTGTGATCGAGATGGTACAAGAGGCTGGTAGAGTAAGTGTCCGAGATGGGATGCCTGA  
GCTCTTGAAGCTGCCCTTCGTTGTTCATGAGTGCCAGCAGCTGCTGCCTTCCATTCTCAGCTGAAAAGAA  
CATCTCAGGAAGCACTGGACACAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC231131 representing NM\_001195254  
Red=Cloning site Green=Tags(s)

MMRVCWLVQRDSRHQRIPLPHLEAVVIGRGPETKITDKKCSRQQEFEAAKNPGLETHRKRKRSGNSDSI  
 ERDAAQEAEAGTGLEPGSNGQCSVPLKKGKDAPIKKESLGHWSQGLKISMQDPKMQVYKDEQVVVIKDK  
 YPKARYHWLVLPWTSISSLKAVAREHLELLKHMHTVGEKVIYVDFAGSSKLRFRLYGHAIPSMHVLHVI  
 SQDFDSPCLKNKKHWNSFNTEYFLESQAVIEMVQEAGRVTVRDGMPELLKPLRCHCECQQLLPISIPQLKE  
 HLRKHWTQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8049\\_f05.zip](https://cdn.origene.com/chromatograms/mk8049_f05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001195254

**ORF Size:** 864 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.

**RefSeq:** [NM\\_001195254.1](#), [NP\\_001182183.1](#)

**RefSeq ORF:** 867 bp

**Locus ID:** 54840

**UniProt ID:** [Q7Z2E3](#)

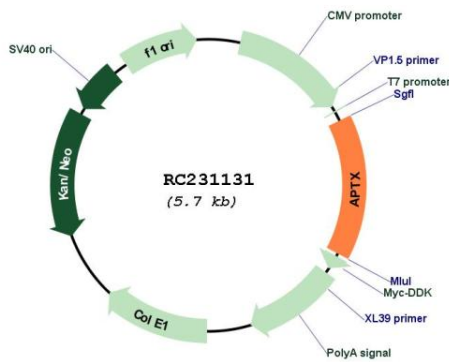
**Cytogenetics:** 9p21.1

**Protein Families:** Druggable Genome

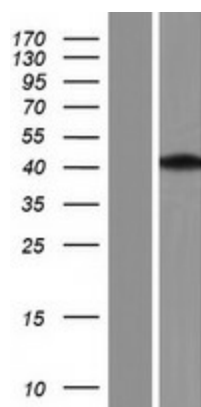
**MW:** 33.6 kDa

**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 RC231131



Western blot validation of overexpression lysate (Cat# [LY434130]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231131 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).