

Product datasheet for **RC224363**

Aprataxin (APTX) (NM_175071) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aprataxin (APTX) (NM_175071) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aprataxin
Synonyms:	AOA; AOA1; aprataxin; ataxia 1, early onset with hypoalbuminemia; AXA1; EAOH; EOAHA; FHA-HIT; FLJ20157; MGC1072; OTTHUMP00000021188
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224363 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGAATGAACTTTATCCATATATTGTAGAGTTTGGAGGAAAGAGGCAAAGAACCCTGGCCTGGAACAC
ACAGGAAGAGAAAGAGATCAGGCAACAGTGATTCTATAGAAAGGGATGCTGCTCAGGAAGCTGAGGCTGG
GACAGGGCTGGAACCTGGGAGCAACTCTGGCCAATGCTCTGTGCCCTAAAGAAGGGAAAAGATGCACCT
ATCAAAAAGGAATCCCTGGGCCACTGGAGTCAAGGCTTGAAGATTTCTATGCAGGACCCAAAATGCAGG
TTTACAAAGATGAGCAGGTGGTGGTATAAAGGATAAATACCCAAAGGCCGTTACCATTGGCTGGTCTT
ACCGTGGACCTCCATTTCCAGTCTGAAGGCTGTGGCCAGGGAACACCTTGAACCTCTTAAGCATATGCAC
ACTGTGGGGAAAAGGTGATTGTAGATTTTGTGGTCCAGCAAACCTCCGCTTCCGATTGGCTACCAGC
CCATTCGAGTATGAGCCATGTACATCTCATGTGATCAGCCAGGATTTTGATTCTCCTTGCCTTAAAAA
CAAAAAACATTGGAATCTTTCAATACAGAATACTTCTAGAATCACAAGCTGTGATCGAGATGGTACAA
GAGGCTGGTAGAGTAACTGTCCGAGATGGGATGCCTGAGCTCTTGAAGCTGCCCTTCGTTGTCATGAGT
GCCAGCAGCTGCTGCCTTCCATTCCTCAGCTGAAAGAACATCTCAGGAAGCACTGGACACAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC224363 protein sequence
 Red=Cloning site Green=Tags(s)

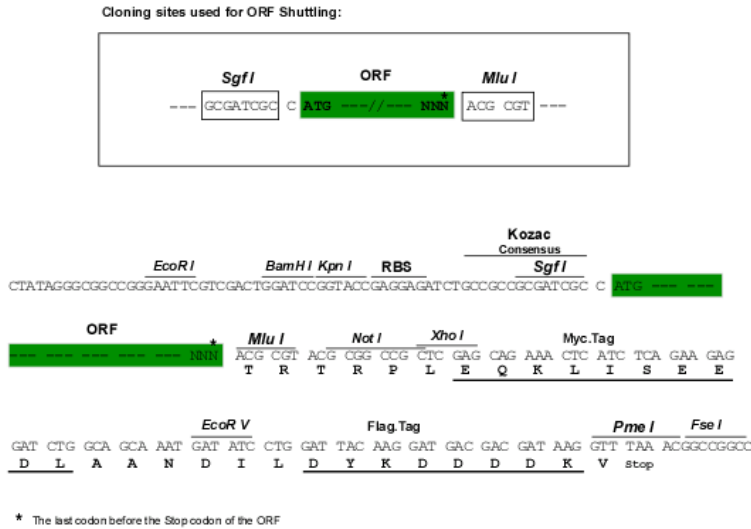
MVNELYPYIVFEFEEAKNPGLETHRKRKRSGNSDSIERDAAQAEAGTGLEPGSNSGQCSVPLKKGKDAP
 IKKESLGHWSQGLKISMQDPKMQVYKDEQVVVIKDKYPKARYHWLVLPWTSISSLKAVAREHELLELLKMH
 TVGEKVIYDFAGSSKLRFRLYGHAIPSMHVHLHVISQDFDSPCLKNKKHWSNFNTEYFLESQAVIEMVQ
 EAGRVTVRDGMPELLKPLRCHECQQLLPSIPQLKEHLRKHWTQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6453_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_175071

ORF Size: 765 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_175071.1](#), [NP_778241.1](#)

RefSeq Size: 1895 bp

RefSeq ORF: 506 bp

Locus ID: 54840

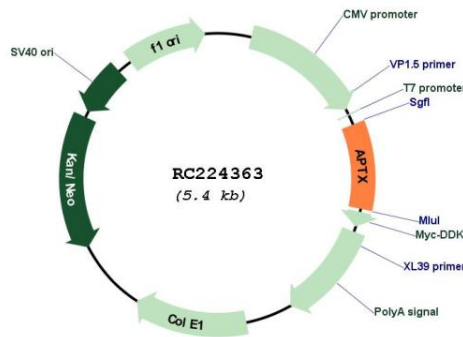
Cytogenetics: 9p21.1

Protein Families: Druggable Genome

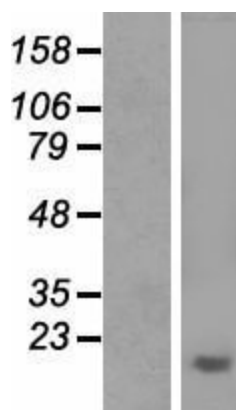
MW: 29.1 kDa

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 RC224363



Western blot validation of overexpression lysate (Cat# [LY406310]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224363 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).