

Product datasheet for MR218020

Aptx (NM_025545) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aptx (NM_025545) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aptx
Synonyms:	2410016G21Rik; AA388047; FHA-HIT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR218020 representing NM_025545 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGGAAGCAGTAGCTAAGATGCGAGTGTGCTGGTTGGTGAGACAGGACAGCAGGCACCAGCGAATCA
AACTTCCCCATTTGGAAGCTGTTGTGATTGGTTCGAAGCCAGAGACCAAGATCACAGATAAGAAATGTTT
CCGACAGCAAGTACAGTTGAAAGCAGAGTGAACAAGGGATATGTCAAAGTACAGCAGATGGGGTCAAC
CCCACCAGCATTGACTCGGGCGTCATCGGAAGGACCAAGAGAAGAAGCTGCTGCCTGGTCAAGTTCTCC
ACATGGTGAATGGACTTTATCCATACATCGTAGAGTTTGAGGAAGTGGCAGAGAGCCCTAACCTAACACA
GAGGAAGAGAAAAGAGGTCAGACTGTGATAGTGAGGAGATGGAAGCTGAGTCTGGGACAGGGCTGGCACCT
GGGAGCAGCCCCAGCCAGTGTCTGTGTCCCCTAAGAAGGACAAGAATGGAGCCACCAAAAAGGAATCAC
TGGGCCACTGGAGTCAAGGCTTGAAGATGTCTATGAAAGACCCCAAAATGCAGGTTTACAAAAGACGACCA
GGTGGTGGTGATTAAGGATAAAACCCCAAGGCCCGTCACCACTGGCTGGTCTTACCGTGGGCTCCATT
TCCAGTCTGAAGGTTGTGACCAGTGAACACCTTGAACCTTCTCAAACATATGCACGCTGTGGGGGAGAAGG
TGATAGCAGATTTTGTGGATCCAGCAAACCTGCGCTTCCGATTGGGCTACCATGCCATCCCAGCATGAG
CCACGTACATCTTCATGTGATCAGCCAGGATTTTGATTCTCCTTGCCCTAAAAACAAAAGCATTGGAAT
TCTTTTAAACAGAATACTTTCTGGAATCACAAGCTGTGATCAAGATGGTTCAGGAAGCCCGCAGAGTGA
CTGTTAAAGATGGCACTTGTGAGCTCTTGAAGCTGCCTCTCCGTTGCCATGAGTGCAGCAGCTGCTGCC
TTCCATCCCGCAGCTGAAAGAGCACCTCAGGAAGCACTGGGGCGGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR218020 representing NM_025545
Red=Cloning site Green=Tags(s)

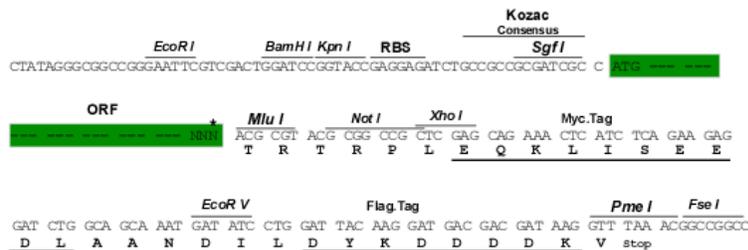
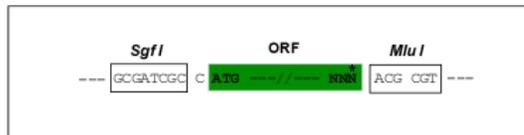
MPEAVAKMRCWLVRQDSRHQRIKLPHEAVVIGRSPETKITDKKCSRQVQLKAECNKGYVKVQQMGMVN
 PTSIDSGVIGKDQEKLLPGQVLHMVNGLYPIYIVFEEVAESPNLTQRKRKRSDCDEEMEAESGTGLAP
 GSSPSQCSVSPKKDKNGATKKESLGHWSQGLKMSMKDPKMVYKDDQVVVVKDKYPKARHHWLVLPWASI
 SSLKVVTSEHLELLKHMHAVGEKVIADFAGSSKLRFRLLGYHAIPSMHVHLHVISQDFDSPCLKNKKHWN
 SFNTEYFLESQAVIKMVQEAGRVTYKDGTCCELLKPLRCHECQQLLPSIPQLKEHLRKHGG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_025545

ORF Size: 1026 bp

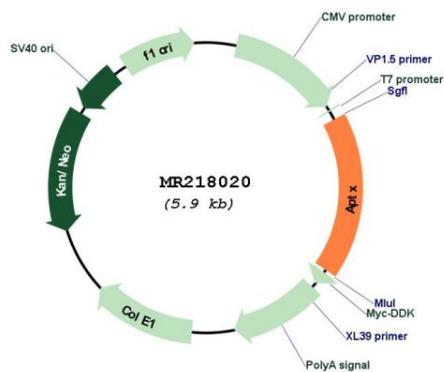
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_025545.4 , NP_079821.3
RefSeq Size:	5689 bp
RefSeq ORF:	1029 bp
Locus ID:	66408
UniProt ID:	Q7TQC5
Cytogenetics:	4 A5
MW:	39.2 kDa
Gene Summary:	DNA-binding protein involved in single-strand DNA break repair, double-strand DNA break repair and base excision repair. Resolves abortive DNA ligation intermediates formed either at base excision sites, or when DNA ligases attempt to repair non-ligatable breaks induced by reactive oxygen species. Catalyzes the release of adenylate groups covalently linked to 5'-phosphate termini, resulting in the production of 5'-phosphate termini that can be efficiently rejoined (PubMed:16964241). Also able to hydrolyze adenosine 5'-monophosphoramidate (AMP-NH ₂) and diadenosine tetraphosphate (AppppA), but with lower catalytic activity (By similarity). Likewise, catalyzes the release of 3'-linked guanosine (DNAppG) and inosine (DNAppI) from DNA, but has higher specific activity with 5'-linked adenosine (AppDNA) (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218020