

Product datasheet for **MG203707**

Aptx (BC068309) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aptx (BC068309) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aptx
Synonyms:	2410016G21Rik; AA388047; FHA-HIT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG203707 representing BC068309 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGTCAACCCACCAGCATTGACTCGGGCGTCATCGGGAAGGACCAAGAGAAGAAGCTGCTGCCTG
GTCAGTTCTCCACATGGTGAATGGACTTTATCCATACATCGTAGAGTTTGAGGAAGTGGCAGAGAGCCC
TAACCTAACACAGAGGAAGAGAAAGAGGTGACTGTGATAGTGAGGAGATGGAAGCTGAGTCTGGGACA
GGGCTGGCACCTGGGAGCAGCCCAGCCAGTCTGTGTCCCCTAAGAAGGACAAGAATGGAGCCACCA
AAAAGGAATCACTGGGCCACTGGAGTCAAGGCTTGAAGATGTCTATGAAAGACCCCAAAATGCAGGTTTA
CAAAGACGACCAGGTGGTGGTGATTAAGGATAAATACCCCAAGGCCGTCACCACTGGCTGGTCTTACCG
TGGGCCTCCATTTCCAGTCTGAAGTGTGACCAGTGAACACCTTGAACCTTCTAAACATATGCACGCTG
TGGGGGAGAAGGTGATAGCAGATTTTGCTGGATCCAGCAAACCTGCGCTTCCGATTGGGCTACCATGCCAT
TCCCAGCATGAGCCACGTACATCTTCAATGTGATCAGCCAGGATTTTGATTCTCCTTGCCTTAAAAACAAA
AAGCATTGGAATCTTTAATACAGAATACTTTCTGGAATCACAAGCTGTGATCAAGATGGTTCCAGGAAG
CCGGCAGAGTGACTGTAAAGATGGCACTTGTGAGCTCTGAAGCTGCCTCTCCGTTGCCATGAGTGCA
GCAGCTGCTGCCTCCATCCCGCAGCTGAAAGAGCACCTCAGGAAGCACTGGGGCCGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >MG203707 representing BC068309
 Red=Cloning site Green=Tags(s)

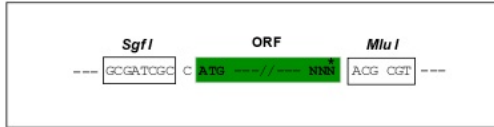
MGVNPTSIDSGVIGKDQEKLLPGQVLHMVNL YPYIVEFEVAESPNL TQRKRKSDCDSEEMEAE SGT
 GLAPGSSPSQCSVSPKKDKNGATKKE SLGHWSQGLKMSMKDPKMQVYKDDQVVV IKDKYPKARHHWL VLP
 WASISSLKVVVTSEHLELLKHMHAVGEKVIAD FAGSSKLRFR LGYHAIPSM SHVHLHVISQDFD SPCLKNK
 KHWSNFNTEYFLESQAVIKMVQEAGRVTVK DGTCELLKPLRCHECQQLLPSIPQLKEHLRKH WGG

TRTRPLE - GFP Tag - V

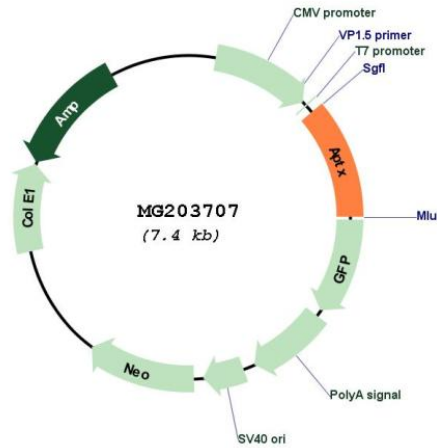
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: BC068309

ORF Size: 830 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:	<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:	BC068309
RefSeq Size:	5171 bp
RefSeq ORF:	830 bp
Locus ID:	66408
Cytogenetics:	4 A5
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]