

## Product datasheet for RC215176

### ATRX (NM\_000489) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATRX (NM_000489) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATRX
Synonyms:	JMS; MRX52; RAD54; RAD54L; XH2; XNP; ZNF-HX
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC215176 representing NM_000489 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGACCGCTGAGCCCATGAGTCAAAGCAAGTTGAATACATTGGTGCAGAAGCTTCATGACTTCCTTGAC  
ACTCATCAGAAGAATCTGAAGAAACAAGTTCTCCTCCAGACTTGCAATGAATCAAAACACAGATAAAAT  
CAGTGGTTCTGGAAGTAAGTCTGATATGATGAAAACAGCAAGGAAGAGGGAAGTCTTCAGAAAAA  
TCCAAGTCTTCAGGATCGTCACGATCAAAGAGGAAACCTTCAATTGTAACAAAGTATGTAGAATCAGATG  
ATGAAAAACCTTTGGATGATGAAACTGTAATGAAGATGCGTCTAATGAAAATTCAGAAAATGATATTAC  
TATGCAGAGCTTGCCAAAAGGTACAGTGATTGTACAGCCAGAGCCAGTGTGAATGAAGACAAAGATGAT  
TTTAAAGGGCCTGAATTTAGAAGCAGAAGTAAAATGAAAATGAAAATCTCAAAAACCGGAGAGAAGATG  
GGCTTCATGGGATTGTGAGCTGCACTGCTTGTGGACAACAGGTCAATCATTTTCAAAAAGATTCCATTTA  
TAGACACCCTTCATTGCAAGTCTTATTTGTAAGAATTGCTTTAAGTATTACATGAGTGATGATATTAGC  
CGTGACTCAGATGGAATGGATGAACAATGTAGGTGGTGTGCGGAAGGTGGAAGTGGTCCACAATAAT  
TTTGCCATAATGCTTTCTGCAAGAAATGCATTCTACGCAACCTTGGTCGAAAGGAGTTGTCACAATAAT  
GGATGAAAACAACCAATGGTATTGCTACATTTGTACCCAGAGCCTTTGTTGGACTTGGTCACTGCATGT  
AACAGCGTATTTGAGAATTTAGAACAGTTGTTGCAGCAAAATAAGAAGAAGATAAAAAGTTGACAGTGAAA  
AGAGTAATAAAGTATATGAACATACATCCAGATTTTCTCAAAGAAGACTAGTTCAAATTGTAATGGAGA  
AGAAAAGAAATAGATGATTCTGTTCTGGCTCTGTAACCTACTCTTATTCGCCTAATTGTGCCAAA  
GAGATGATTAAGAAGGCAAAAAAAGTATTGAGACCACAGCCAACATGAACTCCAGTTATGTTAAATTTT  
TAAAGCAGGCAACAGATAATTCAGAAATCAGTTCTGCTACAAAATTACGTGAGCTTAAGGCTTTAAGTC  
TGTGTTGGCTGATATTAAGAAGGCTCATCTTGCATTGGAAGAAGACTTAAATCCGAGTTTCGAGCGATG  
GATGCTGTAACAAGAGAAAAATACCAAAGAGCATAAAGTCATAGATGCTAAGTTTGAACAAAAGCAC  
GAAAAGGAGAAAAACCTTGTGCTTTGAAAAGAAAGGATATTTCAAAGTCAGAAGCTAAACTTTCAAGAAA  
ACAGGTAGATAGTGAGCACATGCATCAGAAATGTTCCAACAGAGGAACAAAGAACAATAAAAAGTACCGGT  
GGTGAACATAAGAAATCTGATAGAAAAGAAGAACCTCAATATGAACCTGCCAACACTTCTGAAGATTTAG



[View online >](#)

ACATGGATATTGTGTCTGTTCCCTCCTCAGTTCAGAAAGACATTTTTGAGAATCTTGAGACTGCTATGGA  
 AGTTCAGAGTTCAGTTGATCATCAAGGGGATGGCAGCAGTGGAAGTGAACAAGAAGTGGAGAGTTCATCT  
 GTAAAAATAAATATTTCTTCAAAAGACAACAGAGGAGGTATTAATCAAAAACACAGCTAAAGTAACAA  
 AAGAATTATATGTTAACTCACTCCTGTTTCCCTTTCTAATCCCAATTAAGGTGCTGATTGTCAGGA  
 AGTTCCACAAGATAAAGATGGCTATAAAAGTTGGTCTGAACCCCAAGTTAGAGAAATGTGGACTTGA  
 CAGGAAAAACAGTGATAATGAGCATTGGTTGAAAATGAAGTTTCATTACTTTTAGAGGAATCTGATCTTC  
 GAAGATCCCCACGTGTAAGACTACACCTTGAGGCGACCGACAGAAACTAACCTGTAACATCTAATTC  
 AGATGAAGAATGTAATGAAACAGTTAAGGAGAAAACAAAACATATCAGTTCCAGTGAGAAAAAGGATAAG  
 CGTAATCTTCTGACAGTGCTATAGATAATCCTAAGCCTAATAAATGGCCAAATCTAAGCAATCAGAGA  
 CTGTGGATCAAAATTCAGATTCTGATGAAATGCTAGCAATCCTCAAAGAGGTGAGCAGGATGAGTCACAG  
 TTCTTCTCAGATACTGATTAATGAAATTCATAACAACCATAAGACTTTGTATGATTTAAGACTCAG  
 GCGGGGAAAGATGATAAAGGAAAAAGGAAACAAAAAGTTCTACATCTGGCTCAGATTTTGATACTAAAA  
 AGGGCAATCAGCTAAGAGCTCTATAATTTCTAAAAAGAAACGACAAACCCAGTCTGAGTCTTCTAATTA  
 TGACTCAGAATTAGAAAAAGAGATAAAGAGCATGAGTAAAATGGTGTGCCAGAACCACCAAAAAAAGA  
 ATTCAAAATACAAAAGATTTTGACTCTTCTGAAGATGAGAAACACAGCAAAAAGGAATGGATAATCAAG  
 GGCACAAAAATTTGAAGACCTCACAGAAGGATCATCTGATGATGCTGAAAGAAAACAAGAGAGAGAGAC  
 TTTCTCTTCAGCAGAAGGCACAGTTGATAAAGACACGACCATCATGGAATTAAGAGATCGACTTCTAAG  
 AAGCAGCAAGCAAGTGTCCACTGATGGTGTGCGATAAGCTTTCTGGGAAAGAGGAGAGTTTTACTTCTT  
 TGGAAAGTTAGAAAAGTTGCTGAAACTAAAGAAAAGAGCAAGCATCTCAAAACCAAAAATGTAAGAAAGT  
 ACAGGATGGCTTATCTGATATTGACAGAGAAATTCCTAAAGAAAGACCAGAGCGATGAAACTTCTGAAGAT  
 GATAAAAAGCAGAGCAAAAAGGGAAGTGAAGAAAAAGAAACCTTCAGACTTTAAGAAAAAGTAATTA  
 AAATGGAACAACAGTATGAATCTTCATCTGATGGCACTGAAAAGTTACCTGAGCGAGAAGAAATTTGTCA  
 TTTTCTAAGGCATAAAAACAAATTAAGAATGGAACAACCTGATGGAGAAAAGAAAATGAAAAAATAAGA  
 GATAAAAATCTTAAAAAGAGGATGAATTAATCTGATTATGCTGAGAAGTCAACAGGGAAAAGGAGATAGTT  
 GTGACTCTTCAGAGGATAAAAAGAGTAAGAATGGAGCATATGGTAGAGAGAAGAAAAGGTGCAAGTTGCT  
 TGGAAAGAGTTCAAGGAAGAGACAAGATTGTTTCATCATCTGATACTGAGAAATATTCATGAAAAGAGAT  
 GTTTGTAACTCTTCTGATAAGAGACTGAAAAGAAATAGAATTGAGGGAAAGAAAGAAATTAAGTTCAAAGA  
 GAAATACTAAGGAAATACAAAGTGGCTCATCATCTGATGCTGAGGAAAGTTCTGAAGATAATAAAAA  
 GAAGAAGCAAAGAACTTCATCTAAAAAGAGGCAGTCAATGTCAAGGAGAAAAAGAGAACTCCCTAAGA  
 ACAAGCACTAAAAGGAAGCAAGCTGACATTACATCCTCATCTTCTTCTGATATAGAAGATGATGATCAGA  
 ATTCTATAGGTGAGGGAAGCAGCGATGAACAGAAAATTAAGCCTGTGACTGAAAATTTAGTGTCTTCTC  
 ACATACTGGATTTTGCCAACTTCAGGAGATGAAGCCTTATCTAAATCAGTGCCTGTACAGTGGATGAT  
 GATGATGACGACAATGATCCTGAGAATAGAATTGCCAAGAAGATGCTTTTGAAGAAATTAAGCCAATC  
 TTTCTCTGATGAGGATGGATCTTCAGATGATGAGCCAGAAGAAGGGAAAAAAGAACTGGAAAAACAAA  
 TGAAGAAAACCCAGGAGATGAGGAAGCAAAAAATCAAGTCAATTTCTGAATCAGATTCAGATTTCTGAAGAA  
 TCTAAGAAGCCAAGATACAGACATAGGCTTTTGCAGCACAATTTGACTGTGAGTGACGGAGAATCTGGAG  
 AAGAAAAAAGACAAAGCCTAAAGAGCATAAAGAAGTCAAAGGCAGAAACAGAAGAAAGGTGAGCAGTGA  
 AGATTGAGAAGATTCTGATTTTCAGGAATCAGGAGTTAGTGAAGAAGTTAGTGAATCCGAAGATGAACAG  
 CGGCCAGAACAAAGTCTGCAAAGAAAGCAGAGTTGGAAGAAAATCAGCGGAGCTATAAACAGAAAAAGA  
 AAAGGCGACGTATTAAGGTTCAAGAAGATTCATCCAGTGAACAAGAGTAATTCTGAGGAAGAAGAGGA  
 GAAAAAAGAAAGAGGAGGAAAGAGGAGGAGGAGGAAAGAGGAGGAAAGATGAAAATGATGATTCC  
 AAGTCTCTGAAAAGGCAGAAAGAAAATTCGGAAGATTCTTAAAGATGATAAATGAGAACAGAAACAC  
 AAAATGCTCTTAAAGGAAGAGGAAGAGAGACGAAAACGATTGCTGAGAGGGAGCGTGAGCGAGAAAAAT  
 GAGAGAGGTGATAGAAATGAAGATGCTTCAACCCCAAGTGTCCAATAACAACCAAGTTGGTTTTAGAT  
 GAAGATGAAGAAACCAAGAACCTTTAGTGCAGGTTTATAGAAATATGGTTATCAAATGAAACCCCATC  
 AAGTAGATGGTGTTCAGTTTATGTGGGATTGCTGCTGTGAGTCTGTGAAAAAACAAAGAAATCTCCAGG  
 TTCAGGATGCATTCTTGCCCACTGTATGGCCTTGGTAAGACTTTACAGGTGGTAAGTTTTCTTCATACA  
 GTTCTTTTGTGTGACAACTGGATTTTCAAGCAGCGGTTAGTGGTTTGTCCCTTAAATACTGCTTTGAATT  
 GGATGAATGAATTTGAGAAGTGGCAAGAGGGATTAAAAGATGATGAGAAGCTTGAGGTTTCTGAATTAGC  
 AACTGTGAAACGTCCTCAGGAGAGAAGCTACATGCTGCAGAGGTGGCAAGAAGATGGTGGTGTATGATC  
 ATAGGCTATGAGATGTATAGAAATCTTGCTCAAGGAAGGAATGTGAAGAGTCGGAACCTTAAAGAAATAT  
 TTAACAAAGCTTTGGTTGATCCAGGCCCTGATTTTGTGTTTGTGATGAAGGCCATATTCTAAAAATGA

AGCATCTGCTGTTTCTAAAGCTATGAATTCTATACGATCAAGGAGGAGGATTATTTTAACAGGAACACCA  
CTTCAAAATAACCTAATTGAGTATCATTGTATGGTTAATTTTATCAAGGAAAATTTACTTGGATCCATTA  
AGGAGTTCAGGAATAGATTTATAAATCCAATTCAAAATGGTCAGTGTGCAGATTCTACCATGGTAGATGT  
CAGAGTGATGAAAAACGTGCTCACATTCTCTATGAGATGTTAGCTGGATGTGTTTCAGAGGAAAGATTAT  
ACAGCATTAACAAAATTTGCTCCAAAACACGAATATGTGTTAGCTGTGAGAATGACTTCTATTCACT  
GCAAGCTCTATCAGTACTACTTAGATCACTTAACAGGTGTGGCAATAATAGTGAAGGTGGAAGAGGAAA  
GGCAGGTGCAAAAGCTTTTCCAAGATTTTCAGATGTTAAGTAGAATATGGACTCATCCTTGGTGTTCAG  
CTAGACTACATTAGCAAAGAAAATAAGGGTTATTTTATGATGAAGACAGTATGGATGAATTTATAGCCTCAG  
ATTCTGATGAAACCTCCATGAGTTAAGCTCCGATGATTATACAAAAAAGAAAGAAAAAGGGAAAAAGGG  
GAAAAAGATAGTAGCTCAAGTGAAGTGGCAGTGACAATGATGTTGAAGTGATTAAGGTCTGGAATTCA  
AGATCTCGGGGAGGTGGTGAAGGAAATGTGGATGAAACAGGAAACAATCCTTCTGTTTCTTTAAACTGG  
AAGAAAGTAAAGTACTTCTTCTTAATCCAAGCAGCCAGCTCCAGACTGGTACAAAGATTTTGTAC  
AGATGCTGATGCTGAGGTTTTAGAGCATTCTGGGAAAATGGTACTTCTCTTTGAAATTTCTCGAATGGCA  
GAGGAAATGGGGATAAAGTCTTGTTCAGCCAGTCCCTCATATCTCTGGACTTGATTGAAGATTTTC  
TTGAATTAGTAGTAGGAGAAGACAGAAGATAAAGATAAACCCCTTATTTATAAAGGTGAGGGGAAGTG  
GCTTCGAAACATTGACTATTACCGTTTAGATGGTCCACTACTGCACAGTCAAGGAAGAAGTGGGCTGAA  
GAATTTAATGATGAAACTAATGTGAGAGGACGATTATTTATCATTCTACTAAAGCAGGATCTCTAGGAA  
TTAATCTGGTAGCTGCTAATCGAGTAATATATTCGACGCTTCTTGAATCCATCTTATGACATCCAGAG  
TATATTAGAGTTTATCGCTTTGGCAAACAAAGCCTGTTTATGTATATAGGTTCTTAGCTCAGGGAACC  
ATGGAAGATAAAGATTTATGATCGGCAAGTAACTAAGCAGTCACTGTCTTTTCGAGTTGTTGATCAGCAGC  
AGGTGGAGCGTCATTTACTATGAATGAGCTTACTGAACTTTACTTTTGAGCCAGACTTATTAGATGA  
CCCTAATTCAGAAAAGAAGAAGAAGAGGGATACTCCCATGCTGCCAAAGGATACCATACTTGCAAGCTC  
CTTCAGATACATAAAGAACACATTTGAGGATACCATGAACATGATTCTCTTTTGGACCACAAAGAAGAAG  
AAGAGTTGACTGAAGAAGAAAAGAAAGCAGCTTGGGCTGAGTATGAAGCAGAGAAGAAGGGACTGACCAT  
GCGTTTCAACATACCAACTGGGACCAATTTACCCCTGTGAGTTTCAACTCTCAAACCTTATATTCTCT  
TTCAATTTGGGAGCCCTGTGAGCAATGAGTAATCAACAGCTGGAGGACCTCATTAAATCAAGGAAGAGAAA  
AAGTTGTAGAAGCAACAAACAGTGTGACAGCAGTGAAGTCAACCTCTTGAAGTATAATTTAGCTGT  
ATGGAAGGAGAACATGAATCTCTCAGAGGCCAAGTACAGGCGTTAGCATTAAAGTAGACAAGCCAGCCAG  
GAGCTTGATGTTAAACGAAGAGAAGCAATCTACAATGATGATTGACAAAACAACAGATGTTAATCAGCT  
GTGTTTCAGCGAATACTTATGAACAGAAGGCTCCAGCAGCAGTACAATCAGCAGCAACAGCAACAAATGAC  
TTATCAACAAGCAACACTGGGTACCTCATGATGCCAAAGCCCCAAATTTGATCATGAATCCTTCTAAC  
TACCAGCAGATTGATATGAGAGGAATGTATCAGCCAGTGGCTGGTGGTATGCAGCCACCACCATTACAGC  
GTGCACCACCCCAATGAGAAGCAAAAATCCAGGACCTTCCCAAGGGAAATCAATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC215176 representing NM\_000489  
 Red=Cloning site Green=Tags(s)

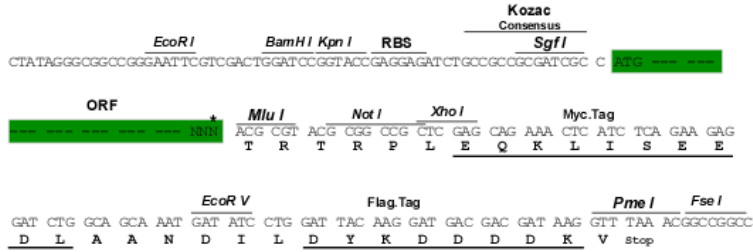
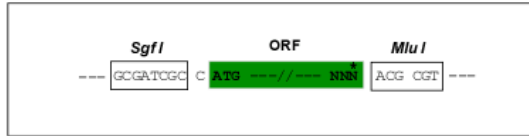
MTAEPMSSEKLNLT VQKLHDFLAHSSESEETSSPPRLAMNQNTDKISGSGSNSDMMENSKEEGTSSSEK  
 SKSSGSSRSKRKPSIVTKYVESDDEKPLDDETVNEDASNENSENDITMQSLPKGTIVVQPEPVLNEDKDD  
 FKGPEFRSRSKMKTENLKKRGEDGLHGI V SCTACGQVNHFKDSIYRHPSLQVLICKNCFKYMSDDIS  
 RSDSDGMEQCRWCAEGGNLICCDFCHNAFCCKCILRNLGRKELSTIMDENNQWYCYICHPEPLLDLVTAC  
 NSVFENLEQLLQONKKKIKVDSEKSNKYVEHTSRFSPKKTSSNCGEKKLDDSCSGSVTYSYALIVPK  
 EMIKKAKKLIETTANMNSSYVFKLQATDNSEISSATKLRQLKAFKSVLADIKKAHLALEEDLNSEFRAM  
 DAVNKEKNTKEHKVIDAKFETKARKGEKPCALEKKDISKSEAKLSRKQVDEHMHQNVPTTEEQRTNKSTG  
 GEHKKSDRKEEPQYEPANTSEDLMDIVSVPSSVPEDIFENLETAMEVQSSVDHQDGGSSGTEQEVESSS  
 VKLNISSKDNRRGKSKTTAKVTKELYVKLTPVLSNSPIKGADCQEVQDKDGYKSCGLNPKLEKCGLG  
 QENSNDNEHLVENEVSLLEESDLRRSPRVKTTPLRRPTE TNPVT SNSDEECNETVKEKQKLSVPVRKDK  
 RNSSDSAIDNPKPNLPSKQSE TVDQNSDSDEMLAILKEVSRMSSSSSDTDINEIHTNHKTL YDLKTQ  
 AGKDDKGRKQKSSSTSGSDFDTKKGSAKSSII SKKKRQTQSESSNYDSELEKEIKSMSKIGAARTTKR  
 IPNTKDFDSEDEKHSKGMNDNGHKNLKT SQEGSSDDAERKQERET FSSAEGTVDKDTT IMELRDRLPK  
 KQQASASTDGVKLSGKEESFTSLEVRKVAETKEKSKHLKTKTCKKVQDGLSDIAEKFLKKDQSDTESD  
 DKQSKKGTTEKKKPSDFKFKVIMKMEQQYESSSDGTEKLPEREEI CHFPKGKIKQIKNGTTDGEKSKKIR  
 DKTSKKKDELSDYAEKSTGKGSDSCDSEDKSKNGAYGREKKRCKLLGKSSRKRQDCSSSDTEKYSMKED  
 GCNSSDKRLKRIELRERRNLSSKRNTKEIQSGSSSSDAEESSEDNKKKKQRTSSKKKAVIVKEKKRNSLR  
 TSTKRKQADITSSSSDIEDDDQNSIGEGSSDEQKIKPVTENL VLSSTHTGFCQSSGDEALSKSVPVTVD  
 DDDNDNDPENRIAKKMLLEEIKANLSSDEDGSSDDEPEEGKRTGKQNEENPGDEEAKNQVNSESDSSEE  
 SKKPRYRHLRLRHKLTVSDGESGEEKTKPKHEKVKGRNRRKVSSESDSDSDFQESGVSSEEVSESEDEQ  
 RPRTRSAKKAELEENQRSYKQKKRRRIKVQEDSSSENKSNSEEEEEEEEEEEEEEEEEEEEEEDNDSDS  
 KSPGKGRKIRKILKDDKLRTE TQNALKEEEERKRIAEREREREKLRVIEIEDASPTKCPITTKLVLD  
 EDEETKEPLVQVHRNMVIKLKPHQVDGVQFMWDCCCEVKKTKKSPGSGCILAHCMLGKTLQVVSFLHT  
 VLLCDKLDSTALVVCPLNTALNWMNEFEKWQEGLDDEKLEVSELATVKRPQERSYMLQRWQEDGGVMI  
 IGYEMYRNLAQGRNVKSRKLEIFNKALVDPGPDFVVCDEGHILKNEASAVSKAMNSIRRRRIILTGTP  
 LQNNLIEYHCMVNF IKENLLGSIKEFRNRFINPIQNGQCADSTMVDVVRVMKKRAHILYEMLAGCVQRKDY  
 TALTKFLPPKHEVYLAVRMTSIQCKLYQYYLDHLTGVGNNSEGGRGKAGAKLFQDFQMLSRIWTHPWCLQ  
 LDYISKENKGYFDEDSMDEFI ASDSDETSMSLSSDDYTKKKKGGKGGKDSSSSGSGSDNDVEVIKWNNS  
 RSRGGGEGNVDETGNNPSVSLKLEESKATSSSNPSSPAPDWYKDFVTDADA EVLEHSGKMVLLFEILRMA  
 EEIGDKVLFVSQSLISLDLIEDFLELASREKTEDKDKPLIYKGEKWLNRNIDYYRLDGSTTAQSRKKWAE  
 EFNDETNVRGRLFIISTKAGSLGINLVAANRVIIIFDASWNP SYDIQSIFRVYRFQGT KPVVYVYRFLAQT  
 MEDKIYDRQVTKQSLSFRVVDQQQVERHFTMNELTELYTFEPDLLDDPNSEKKKKRDTMPLPKDTILAE  
 LQIHKEHIVGYHEHDSL LDHKEEEEELTEEERKA AWA EYAEKGLTMRFNIPGTNLPPVSFNSQTPYIP  
 FNLGALSAMSNQLEDLINQGREKVV EATNSVTAVRIQPLEDII SAVWKENMNLSEAQVQALALSRQASQ  
 ELDVKRREAIYNDVLTQQMLISCVQRILMNRRLQQQYNQQQQMTYQQATLGHLMMPKPPNLIMNPSN  
 YQQIDMRGMYQPVAGGMQPPPLQRAPPPMRSKNP GPSQKSM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

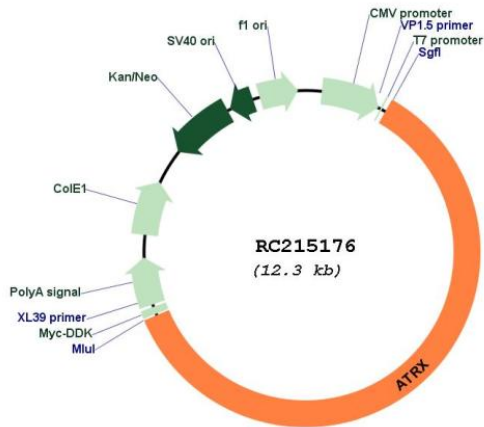
Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

Plasmid Map:



ACCN: NM\_000489

ORF Size: 7476 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](mailto: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:**

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\\_000489.6](#)

**RefSeq Size:** 10330 bp

**RefSeq ORF:** 7479 bp

**Locus ID:** 546

**UniProt ID:** [P46100](#)

**Cytogenetics:** Xq21.1

**Domains:** SNF2\_N, DEAD, helicase\_C

**Protein Families:** Druggable Genome, Transcription Factors

**MW:** 282.4 kDa

**Gene Summary:**

The protein encoded by this gene contains an ATPase/helicase domain, and thus it belongs to the SWI/SNF family of chromatin remodeling proteins. This protein is found to undergo cell cycle-dependent phosphorylation, which regulates its nuclear matrix and chromatin association, and suggests its involvement in the gene regulation at interphase and chromosomal segregation in mitosis. Mutations in this gene are associated with X-linked syndromes exhibiting cognitive disabilities as well as alpha-thalassemia (ATRX) syndrome. These mutations have been shown to cause diverse changes in the pattern of DNA methylation, which may provide a link between chromatin remodeling, DNA methylation, and gene expression in developmental processes. Multiple alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2017]