OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG219519

ATRX (NM_138270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATRX (NM_138270) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATRX
Synonyms:	JMS; MRX52; RAD54; RAD54L; XH2; XNP; ZNF-HX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG219519 representing NM_138270
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACCGCTGAGCCCATGAGTGAAAGCAAGTTGAATACATTGGTGCAGAAGCTTCATGACTTCCTTGCAC
ACTCATCAGAAGAATCTGAAGAAACAAGTTCTCCTCCACGACTTGCAATGAATCAAAACACAGATAAAAT
CAGTGGTTCTGGAAGTAACTCTGATATGATGGAAAACAGCAAGGAAGAGGGAACTAGCTCTTCAGAAAAA
TCCAAGTCTTCAGGATCGTCACGATCAAAGAGGAAACCTTCAATTGTAACAAAGTATGTAGAATCAGATG
ATGAAAAACCTTTGGATGATGAAACTGTAAATGAAGATGCGTCTAATGAAAATTCAGAAAATGATATTAC
TATGCAGAGCTTGCCAAAAGAAGATGGGCTTCATGGGATTGTGAGCTGCACTGCTTGTGGACAACAGGTC
AATCATTTTCAAAAAGATTCCATTTATAGACACCCTTCATTGCAAGTTCTTATTTGTAAGAATTGCTTTA
AGTATTACATGAGTGATGATATTAGCCGTGACTCAGATGGAATGGATGAACAATGTAGGTGGTGTGCGGA
AGGTGGAAACTTGATTTGTTGTGACTTTTGCCATAATGCTTTCTGCAAGAAATGCATTCTACGCAACCTT
GGTCGAAAGGAGTTGTCCACAATAATGGATGAAAACAACCAATGGTATTGCTACATTTGTCACCCAGAGC
CTTTGTTGGACTTGGTCACTGCATGTAACAGCGTATTTGAGAATTTAGAACAGTTGTTGCAGCAAAATAA
GAAGAAGATAAAAGTTGACAGTGAAAAGAGTAATAAAGTATATGAACATACATCCAGATTTTCTCCAAAG
AAGACTAGTTCAAATTGTAATGGAGAAGAAAAGAAATTAGATGATTCCTGTTCTGGCTCTGTAACCTACT
CTTATTCCGCACTAATTGTGCCCAAAGAGATGATTAAGAAGGCAAAAAAACTGATTGAGACCACAGCCAA
CATGAACTCCAGTTATGTTAAATTTTTAAAGCAGGCAACAGATAATTCAGAAATCAGTTCTGCTACAAAA
TTACGTCAGCTTAAGGCTTTTAAGTCTGTGTTGGCTGATATTAAGAAGGCTCATCTTGCATTGGAAGAAG
ACTTAAATTCCGAGTTTCGAGCGATGGATGCTGTAAACAAAGAGAAAAATACCAAAGAGCATAAAGTCAT
AGATGCTAAGTTTGAAACAAAAGCACGAAAAGGAGAAAAACCTTGTGCTTTGGAAAAGAAGGATATTTCA
AAGTCAGAAGCTAAACTTTCAAGAAAACAGGTAGATAGTGAGCACATGCATCAGAATGTTCCAACAGAGG
AACAAAGAACAAATAAAAGTACCGGTGGTGAACATAAGAAATCTGATAGAAAAGAAGAACCTCAATATGA
ACCTGCCAACACTTCTGAAGATTTAGACATGGATATTGTGTCTGTTCCTTCCTCAGTTCCAGAAGACATT

View online »

TTTGAGAATCTTGAGACTGCTATGGAAGTTCAGAGTTCAGTTGATCATCAAGGGGATGGCAGCAGTGGAA
CTGAACAAGAAGTGGAGAGTTCATCTGTAAAATTAAATATTTCTTCAAAAGACAACAGAGGAGGTATTAA
ATCAAAAACTACAGCTAAAGTAACAAAAGAATTATATGTTAAACTCACTCCTGTTTCCCTTTCTAATTCC
CCAATTAAAGGTGCTGATTGTCAGGAAGTTCCACAAGATAAAGATGGCTATAAAAGTTGTGGTCTGAACC
CCAAGTTAGAGAAATGTGGACTTGGACAGGAAAACAGTGATAATGAGCATTTGGTTGAAAATGAAGTTTC
ATTACTTTTAGAGGAATCTGATCTTCGAAGATCCCCACGTGTAAAGACTACACCCTTGAGGCGACCGACA
GAAACTAACCCTGTAACATCTAATTCAGATGAAGAATGTAATGAAACAGTTAAGGAGAAACAAAAACTAT
CAGTTCCAGTGAGAAAAAAGGATAAGCGTAATTCTTCTGACAGTGCTATAGATAATCCTAAGCCTAATAA
ATTGCCAAAATCTAAGCAATCAGAGACTGTGGATCAAAATTCAGATTCTGATGAAATGCTAGCAATCCTC
AAAGAGGTGAGCAGGATGAGTCACAGTTCTTCTTCAGATACTGATATTAATGAAATTCATACAAACCATA
AGACTTTGTATGATTTAAAGACTCAGGCGGGGAAAGATGATAAAGGAAAAAGGAAACGAAAAAGTTCTAC
ATCTGGCTCAGATTTTGATACTAAAAAGGGCAAATCAGCTAAGAGCTCTATAATTTCTAAAAAGAAACGA
CAAACCCAGTCTGAGTCTTCTAATTATGACTCAGAATTAGAAAAAGAGATAAAGAGCATGAGTAAAATTG
GTGCTGCCAGAACCACCAAAAAAAGAATTCCAAATACAAAAGATTTTGACTCTTCTGAAGATGAGAAACA
CAGCAAAAAAGGAATGGATAATCAAGGGCACAAAAATTTGAAGACCTCACAAGAAGGATCATCTGATGAT
GCTGAAAGAAAACAAGAGAGAGAGACTTTCTCTTCAGCAGAAGGCACAGTTGATAAAGACACGACCATCA
TGGAATTAAGAGATCGACTTCCTAAGAAGCAGCAAGCAAGTGCTTCCACTGATGGTGTCGATAAGCTTTC
TGGGAAAGAGCAGAGTTTTACTTCTTTGGAAGTTAGAAAAGTTGCTGAAACTAAAGAAAAGAGCAAGCAT
CTCAAAACCAAAACATGTAAAAAAGTACAGGATGGCTTATCTGATATTGCAGAGAAATTCCTAAAGAAAG
ACCAGAGCGATGAAACTTCTGAAGATGATAAAAAGCAGAGCAAAAAGGGAACTGAAGAAAAAAGAAACC
TTCAGACTTTAAGAAAAAAGTAATTAAAATGGAACAACAGTATGAATCTTCATCTGATGGCACTGAAAAG
TTACCTGAGCGAGAAGAAATTTGTCATTTTCCTAAGGGCATAAAACAAATTAAGAATGGAACAACTGATG
GAGAAAAGAAAAGTAAAAAAATAAGAGATAAAACTTCTAAAAAGAAGGATGAATTATCTGATTATGCTGA
GAAGTCAACAGGGAAAGGAGATAGTTGTGACTCTTCAGAGGATAAAAAGAGTAAGAATGGAGCATATGGT
AGAGAGAAGAAAAGGTGCAAGTTGCTTGGAAAGAGTTCAAGGAAGAGACAAGATTGTTCATCATCTGATA
CTGAGAAATATTCCATGAAAGAAGATGGTTGTAACTCTTCTGATAAGAGACTGAAAAGAATAGAATTGAG
GGAAAGAAGAAATTTAAGTTCAAAGAGAAATACTAAGGAAATACAAAGTGGCTCATCATCATCTGATGCT
GAGGAAAGTTCTGAAGATAATAAAAAGAAGAAGCAAAGAACTTCATCTAAAAAGAAGGCAGTCATTGTCA
AGGAGAAAAAGAGAAACTCCCTAAGAACAAGCACTAAAAGGAAGCAAGCTGACATTACATCCTCATCTTC
TTCTGATATAGAAGATGATGATCAGAATTCTATAGGTGAGGGAAGCAGCGATGAACAGAAAATTAAGCCT
GTGACTGAAAATTTAGTGCTGTCTTCACATACTGGATTTTGCCAATCTTCAGGAGATGAAGCCTTATCTA
AATCAGTGCCTGTCACAGTGGATGATGATGATGACGACAATGATCCTGAGAATAGAATTGCCAAGAAGAT
GCTTTTAGAAGAAATTAAAGCCAATCTTTCCTCTGATGAGGATGGATCTTCAGATGATGAGCCAGAAGAA
GGGAAAAAAAGAACTGGAAAACAAAATGAAGAAAACCCAGGAGATGAGGAAGCAAAAAATCAAGTCAATT
CTGAATCAGATTCAGATTCTGAAGAATCTAAGAAGCCAAGATACAGACATAGGCTTTTGCGGCACAAATT
GACTGTGAGTGACGGAGAATCTGGAGAAGAAAAAAAGACAAAGCCTAAAGAGCATAAAGAAGTCAAAGGC
AGAAACAGAAGAAAGGTGAGCAGTGAAGATTCAGAAGATTCTGATTTTCAGGAATCAGGAGTTAGTGAAG
AAGTTAGTGAATCCGAAGATGAACAGCGGCCCAGAACAAGGTCTGCAAAGAAAGCAGAGTTGGAAGAAAA
TCAGCGGAGCTATAAACAGAAAAAGAAAAGGCGACGTATTAAGGTTCAAGAAGATTCATCCAGTGAAAAC
AAGAGTAATTCTGAGGAAGAAGAGGAGGAAAAAGAAGAGGAGGAGGAAGAGGAGGAGGAGGAAGAGG
AGGAGGAAGATGAAAATGATGATTCCAAGTCTCCTGGAAAAGGCAGAAAGAAAATTCGGAAGATTCTTAA
AGATGATAAACTGAGAACAGAAACACAAAATGCTCTTAAGGAAGAGGAAGAGAGACGAAAACGTATTGCT
GAGAGGGAGCGTGAGCGAGAAAAATTGAGAGAGGTGATAGAAATTGAAGATGCTTCACCCACCAAGTGTC
CAATAACAACCAAGTTGGTTTTAGATGAAGATGAAGAAACCAAAGAACCTTTAGTGCAGGTTCATAGAAA
TATGGTTATCAAATTGAAACCCCATCAAGTAGATGGTGTTCAGTTTATGTGGGATTGCTGCTGTGAGTCT
GTGAAAAAAACAAAGAAATCTCCAGGTTCAGGATGCATTCTTGCCCACTGTATGGGCCTTGGTAAGACTT
TACAGGTGGTAAGTTTTCTTCATACAGTTCTTTTGTGTGACAAACTGGATTTCAGCACGGCGTTAGTGGT
TTGTCCTCTTAATACTGCTTTGAATTGGATGAATGAATTTGAGAAGTGGCAAGAGGGATTAAAAGATGAT
GAGAAGCTTGAGGTTTCTGAATTAGCAACTGTGAAACGTCCTCAGGAGAGAAGCTACATGCTGCAGAGGT
GGCAAGAAGATGGTGGTGTTATGATCATAGGCTATGAGATGTATAGAAATCTTGCTCAAGGAAGGAATGT
GAAGAGTCGGAAACTTAAAGAAATATTTAACAAAGCTTTGGTTGATCCAGGCCCTGATTTTGTTGTTTGT
GATGAAGGCCATATTCTAAAAAATGAAGCATCTGCTGTTTCTAAAGCTATGAATTCTATACGATCAAGGA

GGAGGATTATTTTAACAGGAACACCACTTCAAAATAACCTAATTGAGTATCATTGTATGGTTAATTTTAT
CAAGGAAAATTTACTTGGATCCATTAAGGAGTTCAGGAATAGATTTATAAATCCAATTCAAAATGGTCAG
TGTGCAGATTCTACCATGGTAGATGTCAGAGTGATGAAAAAACGTGCTCACATTCTCTATGAGATGTTAG
CTGGATGTGTTCAGAGGAAAGATTATACAGCATTAACAAAATTCTTGCCTCCAAAACACGAATATGTGTT
AGCTGTGAGAATGACTTCTATTCAGTGCAAGCTCTATCAGTACTACTTAGATCACTTAACAGGTGTGGGC
AATAATAGTGAAGGTGGAAGAGGAAAGGCAGGTGCAAAGCTTTTCCAAGATTTTCAGATGTTAAGTAGAA
TATGGACTCATCCTTGGTGTTTGCAGCTAGACTACATTAGCAAAGAAAATAAGGGTTATTTTGATGAAGA
CAGTATGGATGAATTTATAGCCTCAGATTCTGATGAAACCTCCATGAGTTTAAGCTCCGATGATTATACA
AAAAAGAAGAAAAAAGGGAAAAAGGGGAAAAAAGATAGTAGCTCAAGTGGAAGTGGCAGTGACAATGATG
TTGAAGTGATTAAGGTCTGGAATTCAAGATCTCGGGGAGGTGGTGAAGGAAATGTGGATGAAACAGGAAA
CAATCCTTCTGTTTCTTTAAAACTGGAAGAAAGTAAAGCTACTTCTTCTTCTAATCCAAGCAGCCCAGCT
CCAGACTGGTACAAAGATTTTGTTACAGATGCTGATGCTGAGGTTTTAGAGCATTCTGGGAAAATGGTAC
TTCTCTTTGAAATTCTTCGAATGGCAGAGGAAATTGGGGATAAAGTCCTTGTTTTCAGCCAGTCCCTCAT
ATCTCTGGACTTGATTGAAGATTTTCTTGAATTAGCTAGTAGGGAGAAGACAGAAGATAAAGATAAACCC
CTTATTTATAAAGGTGAGGGGAAGTGGCTTCGAAACATTGACTATTACCGTTTAGATGGTTCCACTACTG
CACAGTCAAGGAAGAAGTGGGCTGAAGAATTTAATGATGAAACTAATGTGAGAGGACGATTATTTATCAT
TTCTACTAAAGCAGGATCTCTAGGAATTAATCTGGTAGCTGCTAATCGAGTAATTATATTCGACGCTTCT
TGGAATCCATCTTATGACATCCAGAGTATATTCAGAGTTTATCGCTTTGGACAAACTAAGCCTGTTTATG
TATATAGGTTCTTAGCTCAGGGAACCATGGAAGATAAGATTTATGATCGGCAAGTAACTAAGCAGTCACT
GTCTTTTCGAGTTGTTGATCAGCAGCAGGTGGAGCGTCATTTTACTATGAATGAGCTTACTGAACTTTAT
ACTTTTGAGCCAGACTTATTAGATGACCCTAATTCAGAAAAGAAGAAGAAGAGGGATACTCCCATGCTGC
CAAAGGATACCATACTTGCAGAGCTCCTTCAGATACATAAAGAACACATTGTAGGATACCATGAACATGA
TTCTCTTTTGGACCACAAAGAAGAAGAAGAGTTGACTGAAGAAGAAAGAAAAGCAGCTTGGGCTGAGTAT
GAAGCAGAGAAGAAGGGACTGACCATGCGTTTCAACATACCAACTGGGACCAATTTACCCCCTGTCAGTT
TCAACTCTCAAACTCCTTATATTCCTTTCAATTTGGGAGCCCTGTCAGCAATGAGTAATCAACAGCTGGA
GGACCTCATTAATCAAGGAAGAGAAAAAGTTGTAGAAGCAACAAACAGTGTGACAGCAGTGAGGATTCAA
CCTCTTGAGGATATAATTTCAGCTGTATGGAAGGAGAACATGAATCTCTCAGAGGCCCAAGTACAGGCGT
TAGCATTAAGTAGACAAGCCAGCCAGGAGCTTGATGTTAAACGAAGAGAAGCAATCTACAATGATGTATT
GACAAAACAACAGATGTTAATCAGCTGTGTTCAGCGAATACTTATGAACAGAAGGCTCCAGCAGCAGTAC
AATCAGCAGCAACAGCAACAAATGACTTATCAACAAGCAACACTGGGTCACCTCATGATGCCAAAGCCCC
CAAATTTGATCATGAATCCTTCTAACTACCAGCAGATTGATATGAGAGGAATGTATCAGCCAGTGGCTGG
TGGTATGCAGCCACCACCATTACAGCGTGCACCACCCCCAATGAGAAGCAAAAATCCAGGACCTTCCCAA
GGGAAATCAATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

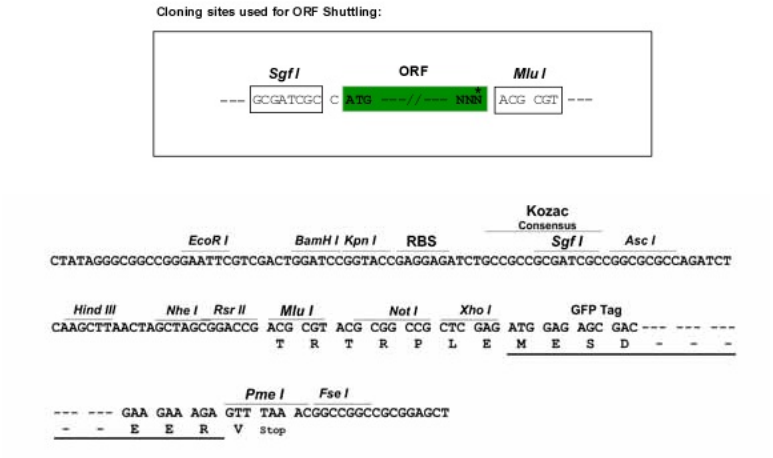
>RG219519 representing NM_138270
Red=Cloning site Green=Tags(s)

MTAEPMSESKLNTLVQKLHDFLAHSSEESEETSSPPRLAMNQNTDKISGSGSNSDMMENSKEEGTSSSEK
SKSSGSSRSKRKPSIVTKYVESDDEKPLDDETVNEDASNENSENDITMQSLPKEDGLHGIVSCTACGQQV
NHFQKDSIYRHPSLQVLICKNCFKYYMSDDISRDSDGMDEQCRWCAEGGNLICCDFCHNAFCKKCILRNL
GRKELSTIMDENNQWYCYICHPEPLLDLVTACNSVFENLEQLLQQNKKKIKVDSEKSNKVYEHTSRFSPK
KTSSNCNGEEKKLDDSCSGSVTYSYSALIVPKEMIKKAKKLIETTANMNSSYVKFLKQATDNSEISSATK
LRQLKAFKSVLADIKKAHLALEEDLNSEFRAMDAVNKEKNTKEHKVIDAKFETKARKGEKPCALEKKDIS
KSEAKLSRKQVDSEHMHQNVPTEEQRTNKSTGGEHKKSDRKEEPQYEPANTSEDLDMDIVSVPSSVPEDI
FENLETAMEVQSSVDHQGDGSSGTEQEVESSSVKLNISSKDNRGGIKSKTTAKVTKELYVKLTPVSLSNS
PIKGADCQEVPQDKDGYKSCGLNPKLEKCGLGQENSDNEHLVENEVSLLLEESDLRRSPRVKTTPLRRPT
ETNPVTSNSDEECNETVKEKQKLSVPVRKKDKRNSSDSAIDNPKPNKLPKSKQSETVDQNSDSDEMLAIL
KEVSRMSHSSSSDTDINEIHTNHKTLYDLKTQAGKDDKGKRKRKSSTSGSDFDTKKGKSAKSSIISKKKR
QTQSESSNYDSELEKEIKSMSKIGAARTTKKRIPNTKDFDSSEDEKHSKKGMDNQGHKNLKTSQEGSSDD
AERKQERETFSSAEGTVDKDTTIMELRDRLPKKQQASASTDGVDKLSGKEQSFTSLEVRKVAETKEKSKH
LKTKTCKKVQDGLSDIAEKFLKKDQSDETSEDDKKQSKKGTEEKKKPSDFKKKVIKMEQQYESSSDGTEK
LPEREEICHFPKGIKQIKNGTTDGEKKSKKIRDKTSKKKDELSDYAEKSTGKGDSCDSSEDKKSKNGAYG
REKKRCKLLGKSSRKRQDCSSSDTEKYSMKEDGCNSSDKRLKRIELRERRNLSSKRNTKEIQSGSSSSDA
EESSEDNKKKKQRTSSKKKAVIVKEKKRNSLRTSTKRKQADITSSSSSDIEDDDQNSIGEGSSDEQKIKP
VTENLVLSSHTGFCQSSGDEALSKSVPVTVDDDDDDNDPENRIAKKMLLEEIKANLSSDEDGSSDDEPEE
GKKRTGKQNEENPGDEEAKNQVNSESDSDSEESKKPRYRHRLLRHKLTVSDGESGEEKKTKPKEHKEVKG
RNRRKVSSEDSEDSDFQESGVSEEVSESEDEQRPRTRSAKKAELEENQRSYKQKKKRRRIKVQEDSSSEN
KSNSEEEEEEKEEEEEEEEEEEEEEEDENDDSKSPGKGRKKIRKILKDDKLRTETQNALKEEEERRKRIA
ERERE REKLREVIEIEDASPTKCPITTKLVLDEDEETKEPLVQVHRNMVIKLKPHQVDGVQFMWDCCCES
VKKTKKSPGSGCILAHCMGLGKTLQVVSFLHTVLLCDKLDFSTALVVCPLNTALNWMNEFEKWQEGLKDD
EKLEVSELATVKRPQERSYMLQRWQEDGGVMIIGYEMYRNLAQGRNVKSRKLKEIFNKALVDPGPDFVVC
DEGHILKNEASAVSKAMNSIRSRRRIILTGTPLQNNLIEYHCMVNFIKENLLGSIKEFRNRFINPIQNGQ
CADSTMVDVRVMKKRAHILYEMLAGCVQRKDYTALTKFLPPKHEYVLAVRMTSIQCKLYQYYLDHLTGVG
NNSEGGRGKAGAKLFQDFQMLSRIWTHPWCLQLDYISKENKGYFDEDSMDEFIASDSDETSMSLSSDDYT
KKKKKGKKGKKDSSSSGSGSDNDVEVIKVWNSRSRGGGEGNVDETGNNPSVSLKLEESKATSSSNPSSPA
PDWYKDFVTDADAEVLEHSGKMVLLFEILRMAEEIGDKVLVFSQSLISLDLIEDFLELASREKTEDKDKP
LIYKGEGKWLRNIDYYRLDGSTTAQSRKKWAEEFNDETNVRGRLFIISTKAGSLGINLVAANRVIIFDAS
WNPSYDIQSIFRVYRFGQTKPVYVYRFLAQGTMEDKIYDRQVTKQSLSFRVVDQQQVERHFTMNELTELY
TFEPDLLDDPNSEKKKKRDTPMLPKDTILAELLQIHKEHIVGYHEHDSLLDHKEEEELTEEERKAAWAEY
EAEKKGLTMRFNIPTGTNLPPVSFNSQTPYIPFNLGALSAMSNQQLEDLINQGREKVVEATNSVTAVRIQ
PLEDIISAVWKENMNLSEAQVQALALSRQASQELDVKRREAIYNDVLTKQQMLISCVQRILMNRRLQQQY
NQQQQQQMTYQQATLGHLMMPKPPNLIMNPSNYQQIDMRGMYQPVAGGMQPPPLQRAPPPMRSKNPGPSQ
GKSM

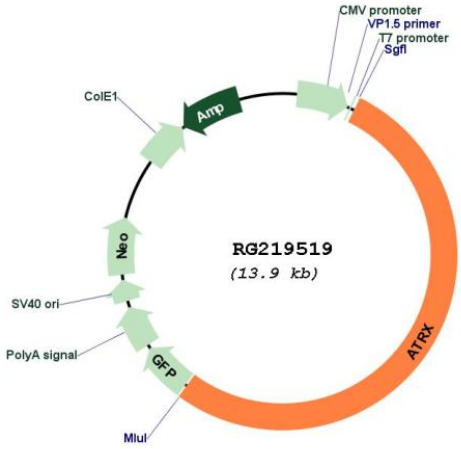
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_138270

ORF Size: 7362 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_138270.2
RefSeq Size:	10216 bp
RefSeq ORF:	7365 bp
Locus ID:	546
UniProt ID:	P46100
Cytogenetics:	Xq21.1
Domains:	SNF2_N, DEAD, helicase_C
Protein Families:	Druggable Genome, Transcription Factors
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]