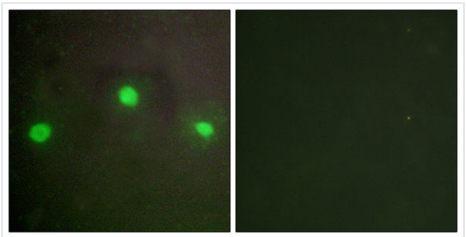
ATRX Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	ATRX, Polyclonal Antibody
Full Product Name	ATRX Antibody
Product Gene Name	anti-ATRX antibody
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Purified from rabbit antiserum by affinity-chromatography using immunogen.
Concentration	1 mg/ml (lot specific)
Specificity	ATRX Antibody detects endogenous levels of total ATRX protein.
Preparation and Storage	Stable at -20 degree C for at least 1 year.
Molecular Weight	282 kDa
OMIM	U72937 mRNA
3D Structure	ModBase 3D Structure for P46100
Target Modification	Unmodified/Total
Immunogen	The antiserum was produced against synthesized peptide derived from human ATRX.
Immunogen Range	111-160
Applications Tested/Suitable for anti-ATRX antibody	Immunofluorescence (IF), ELISA (EIA)
Application Notes for anti-ATRX antibody	IF: 1:100~1:500 ELISA: 1:10000
Related Product Information for anti-ATRX antibody	MBS9505072 is an antibody targeting ATRX. Also known as ATRX Antibody. Reactive in Human, Mouse. Host: Rabbit.
Other Notes	Small volumes of anti-ATRX antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Immunofluorescence (IF) of anti-ATRX antibody
Immunofluorescence analysis of A549 cells, using ATRX Antibody. The picture on the right is blocked with the synthesized peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ATRX. It may not necessarily be applicable to this product.

NCBI GI #	530788276
NCBI GeneID	546
NCBI Accession #	NP_000480.3
UniProt Primary Accession #	P46100
UniProt Secondary Accession #	P51068; Q15886; Q59FB5; Q59H31; Q5H9A2; Q5JWI4; Q7Z2J1; Q9H0Z1; Q9NTS3; D3DTE2
UniProt Related Accession #	P46100
GenBank Nucleotide #	NM_000489.4
NCBI Official Full Name	transcriptional regulator ATRX isoform 1
NCBI Official Synonym Full Names	ATRX, chromatin remodeler
NCBI Official Symbol	ATRX
NCBI Official Synonym Symbols	JMS; XH2; XNP; MRX52; RAD54; RAD54L; ZNF-HX
UniProt Protein Name	Transcriptional regulator ATRX
UniProt Synonym Protein Names	ATP-dependent helicase ATRX; X-linked helicase II; X-linked nuclear protein; XNP; Znf-HX
Protein Family	Protein CHROMATIN REMODELING
UniProt Gene Name	ATRX
UniProt Synonym Gene Names	RAD54L; XH2; XNP
NCBI Protein Information	transcriptional regulator ATRX
NCBI Summary for ATRX	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]
UniProt Comments for ATRX	Involved in transcriptional regulation and chromatin remodeling. Facilitates DNA replication in multiple cellular environments and is required for efficient replication of a subset of genomic loci. Binds to DNA tandem repeat sequences in both telomeres and euchromatin and in vitro binds DNA quadruplex structures. May help stabilizing G-rich regions into regular chromatin structures by remodeling G4 DNA and incorporating H3.3-containing nucleosomes. Catalytic component of the chromatin remodeling complex ATRX:DAXX which has ATP-dependent DNA translocase activity and catalyzes the replication-independent deposition of histone H3.3 in pericentric DNA repeats outside S-phase and telomeres, and the in vitro remodeling of H3.3-containing nucleosomes. Its heterochromatin targeting is proposed to involve a combinatorial readout of histone H3 modifications (specifically methylation states of H3K9 and H3K4) and association with CBX5. Involved in maintaining telomere structural integrity in embryonic stem cells which probably implies recruitment of CBX5 to telomers. Reports on the involvement in transcriptional regulation of telomeric repeat-containing RNA (TERRA) are conflicting; according to a report, it is not sufficient to decrease chromatin condensation at telomers nor to increase expression of telomeric RNA in fibroblasts (PubMed:24500201). May be involved in telomere maintenance via recombination in ALT (alternative lengthening of telomeres) cell lines. Acts as negative regulator of chromatin incorporation of transcriptionally repressive histone H2AFY, particularily at telomeres and the alpha-globin cluster in erythroleukemic cells. Participates in the allele-specific gene expression at the imprinted IGF2/H19 gene locus. On the maternal allele, required for the chromatin occupancy of SMC1 and CTCTF within the H19 imprinting control region (ICR) and involved in esatblishment of histone tails modifications in the ICR. May be involved in brain development and facial morphogenesis. Binds to zinc-finger coding genes with atypical chromatin signatures and regulates its H3K9me3 levels. Forms a complex with ZNF274, TRIM28 and SETDB1 to facilitate the deposition and maintenance of H3K9me3 at the 3' exons of zinc-finger genes (PubMed:27029610).

Research Articles on ATRX	**1.** The results of this study support an important role for ATRX loss and acquisition of ALT in the biology of NF1-associated gliomas, particularly diffuse and high-grade tumors developing in adults.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-antibody/atrx/9505072