

# Datasheet for ABIN7091198

# anti-ATRX antibody (AA 131-230)



### Overview

Quantity:	100 μL
Target:	ATRX
Binding Specificity:	AA 131-230
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATRX antibody is un-conjugated
Application:	ELISA, Western Blotting (WB)

### **Product Details**

Immunogen:	KLH conjugated synthetic peptide derived from human ATRX
Isotype:	IgG
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Human,Dog,Cow,Sheep,Pig,Horse,Chicken,Rabbit
Purification:	Purified by Protein A.

## Target Details

Target:	ATRX
Alternative Name:	ATRX (ATRX Products)
Background:	Synonyms: Alpha thalassemia/mental retardation syndrome X linked homolog, ATP dependent

helicase ATRX, ATP-dependent helicase ATRX, ATR2, Atrx, ATRX\_HUMAN, DNA dependent ATPase and helicase, Helicase 2, X linked, MGC2094, MRXHF1, RAD54, RAD54L, SFM1, SHS, Transcriptional regulator ATRX, X linked helicase II, X linked nuclear protein, X-linked helicase II, X-linked nuclear protein, XH2, XNP, Znf HX, Znf-HX.

Background: 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 ATPdependent 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).

Gene ID:

546

UniProt:

P46100

#### **Application Details**

Application Notes:

WB 1:300-5000

## **Application Details**

	ELISA 1:500-1000
Restrictions:	For Research Use only
Handling	
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months