ATRX Antibody

Catalog No: #33777

Package Size: #33777-1 50ul #33777-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

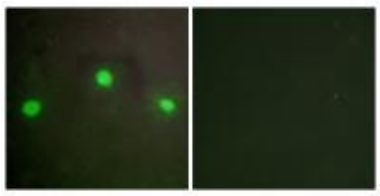
Description

Product Name	ATRX Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	IF
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total ATRX protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from N-terminal of human ATRX.
Target Name	ATRX
Other Names	EC 3.6.1.-; RAD54L; Transcriptional regulator ATRX; X-linked helicase II; X-linked nuclear protein
Accession No.	Swiss-Prot: P46100NCBI Gene ID: 546
Uniprot	P46100
GeneID	546;
SDS-PAGE MW	280kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Immunofluorescence: 1:100~1:500

Images



Immunofluorescence analysis of A549 cells, using ATRX antibody #33777.

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 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 () is not sufficient to decrease chromatin condensation at telomers nor to increase expression of telomeric RNA in fibroblasts. 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.

Picketts D.J., Hum. Mol. Genet. 5:1899-1907(1996).

Villard L., Genomics 43:149-155(1997).

Kitano T., Mol. Biol. Evol. 20:1281-1289(2003).

Note: This product is for in vitro research use only