

ATRX (D-19): sc-10078

BACKGROUND

ATRX is a member of the Snf2 family of helicase/ATPases, which contribute to the remodeling of the nucleosome structure in an ATP-dependent manner, and facilitate the initiation of transcription and replication. Structurally, ATRX contains a PHD zinc finger motif. ATRX is regulated throughout the cell cycle where it is differentially distributed within the nucleus. During interphase, ATRX predominately associates with the nuclear matrix, while during mitosis, ATRX localizes with condensed chromatin. At the onset of M phase, phosphorylation rapidly induces this redistribution of ATRX to the short arms of human acrocentric chromosomes, where it then specifically complexes with heterochromatin protein 1 α to mediate chromosomal segregation. Mutations in the ATRX gene correlate with a high incidence of severe X-linked form of syndromal mental retardation associated with α thalassaemia or ATRX syndrome.

CHROMOSOMAL LOCATION

Genetic locus: ATRX (human) mapping to Xq21.1; Atrx (mouse) mapping to X D.

SOURCE

ATRX (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ATRX of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10078 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ATRX (D-19) is recommended for detection of ATRX of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ATRX (D-19) is also recommended for detection of ATRX in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ATRX siRNA (h): sc-37704, ATRX siRNA (m): sc-37705, ATRX shRNA Plasmid (h): sc-37704-SH, ATRX shRNA Plasmid (m): sc-37705-SH, ATRX shRNA (h) Lentiviral Particles: sc-37704-V and ATRX shRNA (m) Lentiviral Particles: sc-37705-V.

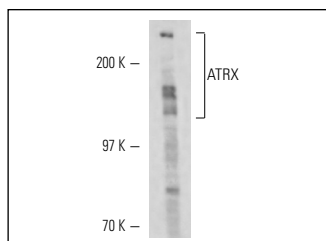
Molecular Weight of ATRX: 280 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

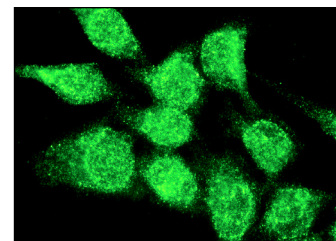
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ATRX (D-19): sc-10078. Western blot analysis of ATRX expression in HeLa nuclear extract.



ATRX (D-19): sc-10078. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Xue, Y., et al. 2003. The ATRX syndrome protein forms a chromatin-remodeling complex with Daxx and localizes in promyelocytic leukemia nuclear bodies. *Proc. Natl. Acad. Sci. USA* 100: 10635-10640.
- Lukashchuk, V., et al. 2010. Regulation of ICP0-null mutant herpes simplex virus type 1 infection by ND10 components ATRX and hDaxx. *J. Virol.* 84: 4026-4040.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **ATRX (D-5): sc-55584**, our highly recommended monoclonal alternatives to ATRX (D-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **ATRX (D-5): sc-55584**.