

Anti-ATRX antibody ab97508

★★★★★ [3 Abreviews](#) [25 References](#) [10 图像](#)

概述	
产品名称	Anti-ATRX抗体
描述	兔多克隆抗体to ATRX
宿主	Rabbit
经测试应用	适用于: IP, WB, IHC-P, ICC/IF
种属反应性	与反应: Mouse, Rat, Human
免疫原	Recombinant fragment corresponding to Human ATRX aa 2211-2413. Database link: P46100
阳性对照	293T, HepG2, Raji, NIH-3T3, HeLa A431, H1299 and HeLaS3 cell lines. A549 xenograft.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>
性能	
形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG
应用	

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IP		1/100 - 1/500.
WB	★★★★★ (1)	1/500 - 1/3000. Predicted molecular weight: 283 kDa.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

靶标

功能

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, particularly 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 CTCF within the H19 imprinting control region (ICR) and involved in establishment 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).

组织特异性

Ubiquitous.

疾病相关

Alpha-thalassemia mental retardation syndrome, X-linked
Mental retardation, X-linked, syndromic, with hypotonic facies 1
Alpha-thalassemia myelodysplasia syndrome

序列相似性

Belongs to the SNF2/RAD54 helicase family.
Contains 1 ADD domain.
Contains 1 GATA-type zinc finger.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.
Contains 1 PHD-type zinc finger.

结构域

The ADD domain predominantly interacts with histone H3 trimethylated at 'Lys-10'(H3K9me3) (and to a lesser extent H3 mono-or dimethylated at 'Lys-10') and simultaneously to histone H3 unmethylated at 'Lys-5' (H3K4me0). The interaction with H3K9me3 is disrupted by the presence of H3K4me3 suggesting a readout of the combined histone H3 methylation state. Contains one Pro-Xaa-Val-Xaa-Leu (PxVxL) motif, which is required for interaction with chromoshadow domains. This motif requires additional residues -7, -6, +4 and +5 of the central Val which contact the chromoshadow domain.

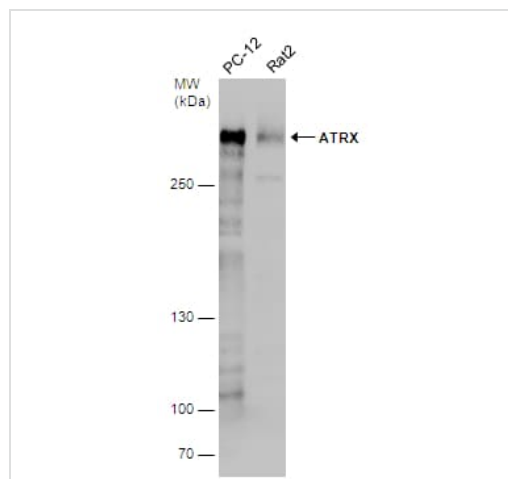
翻译后修饰

Phosphorylated at serine residues during mitose. Phosphorylation may promote the release from the nuclear matrix and progression to mitosis.

细胞定位

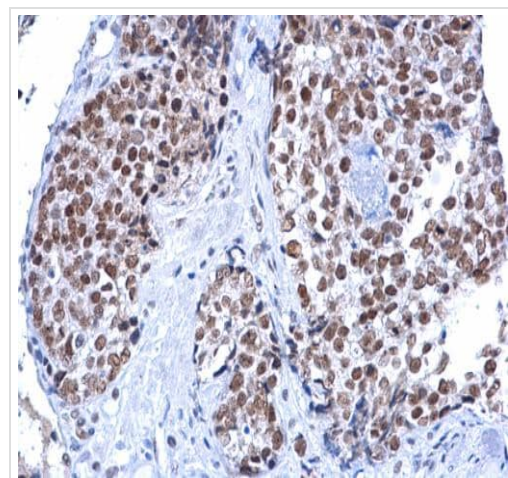
Nucleus. Chromosome, telomere. Nucleus, PML body. Associated with pericentromeric heterochromatin during interphase and mitosis, probably by interacting with CBX5/HP1 alpha. Colocalizes with histone H3.3, DAXX, HIRA and ASF1A at PML-nuclear bodies. Colocalizes with cohesin (SMC1 and SMC3) and MECP2 at the maternal H19 ICR (By similarity).

图片



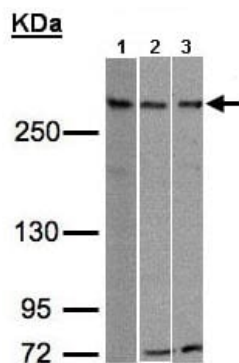
Western blot - Anti-ATRX antibody (ab97508)

Western blot of (lane1) PC12 (brain)whole cell extracts, (lane 2) Rat 2 (embryo) whole cell extracts, at 30µg per lane, labeling ATRX with ab97508 at 1:1000. A HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATRX antibody (ab97508)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma labeling ATRX with ab97508 at 1/500 dilution. Anti-ATRX antibody (ab97508) detects ATRX protein at nucleus on human breast carcinoma tissue sections.



Western blot - Anti-ATR antibody (ab97508)

All lanes : Anti-ATR antibody (ab97508) at 1/500 dilution

Lane 1 : 293T whole cell lysate

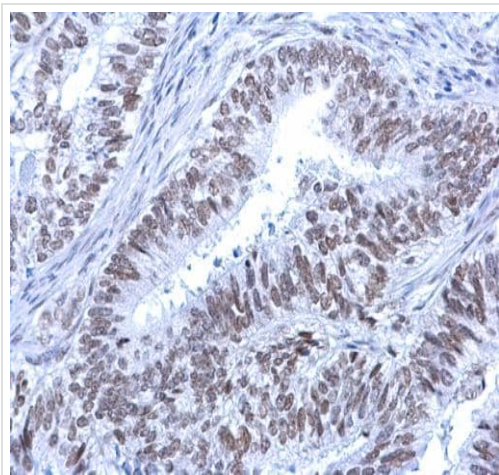
Lane 2 : HepG2 whole cell lysate

Lane 3 : Raji whole cell lysate

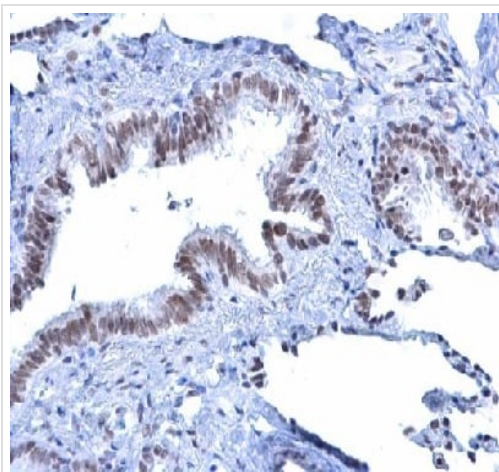
Lysates/proteins at 30 µg per lane.

Predicted band size: 283 kDa

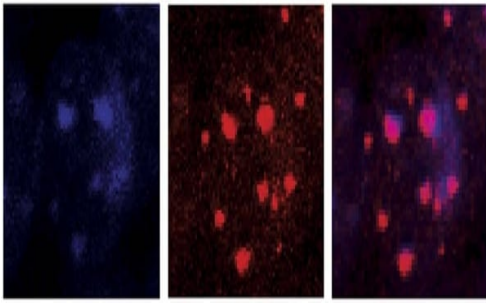
5% SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATR antibody (ab97508)



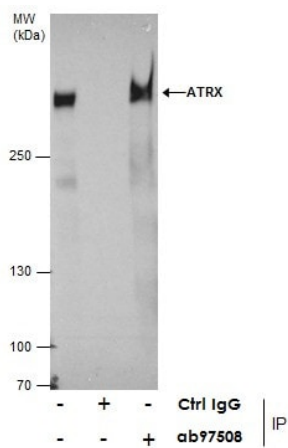
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATR antibody (ab97508)



Immunocytochemistry/ Immunofluorescence analysis of mouse brain labeling ATRX with ab97508 at 1/100 dilution. Left- DAPI (blue), middle - ATRX protein staining (red), right - merge.

Immunocytochemistry/ Immunofluorescence - Anti-ATRX antibody (ab97508)

Image from Heckman, L. D., et al. eLife 3 (2014): e02676. doi: 10.7554/eLife.02676. Fig 4D. Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>



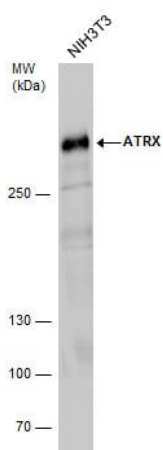
ab97508 at 5µg immunoprecipitating ATRX in 293T whole cell extracts.

Lane 1 (input): 293T whole cell extracts.

Lane 2 (-): Rabbit IgG instead of ab97508 in 293T whole cell extracts.

Lane 3 (+): Anti-ATRX antibody (ab97508) + 293T whole cell extracts.

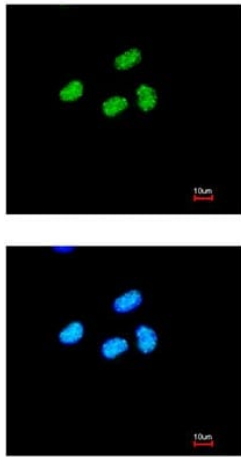
Immunoprecipitation - Anti-ATRX antibody (ab97508)



Anti-ATRX antibody (ab97508) at 1/1000 dilution + NIH3T3 whole cell extracts at 30 µg

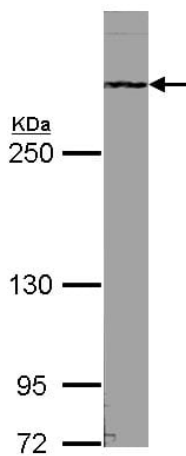
Predicted band size: 283 kDa

Western blot - Anti-ATRX antibody (ab97508)



Immunofluorescence analysis of paraformaldehyde-fixed HeLa cells, using ab97508 at 1/200 dilution. Lower image is merged with DNA probe.

Immunocytochemistry/ Immunofluorescence - Anti-ATR antibody (ab97508)



Anti-ATR antibody (ab97508) at 1/1000 dilution + NIH-3T3 whole cell lysate at 30 µg

Predicted band size: 283 kDa

5% SDS-PAGE

Western blot - Anti-ATR antibody (ab97508)

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