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ATRX Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ATRX.
Catalog # AT1246a

Product Information

Application	WB, E
Primary Accession	P46100
Other Accession	NM_000489
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	3C9
Calculated MW	282587

Additional Information

Gene ID	546
Other Names	Transcriptional regulator ATRX, ATP-dependent helicase ATRX, X-linked helicase II, X-linked nuclear protein, XNP, Znf-HX, ATRX, RAD54L, XH2
Target/Specificity	ATRX (NP_000480, 2311 a.a. ~ 2410 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ATRX Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

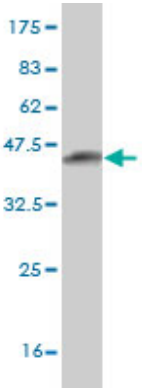
Background

The protein encoded by this gene contains an ATPase/helicase domain, and thus it belongs to the SWI/SNF family of chromatin remodeling proteins. The mutations of this gene are associated with an X-linked mental retardation (XLMR) syndrome most often accompanied by 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. 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. Multiple alternatively spliced transcript variants encoding distinct isoforms have been reported.

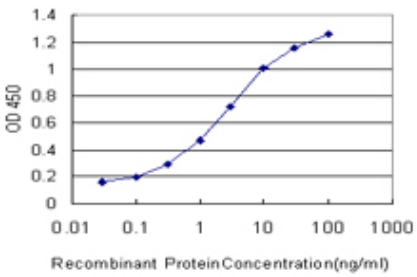
References

ATRX partners with cohesin and MeCP2 and contributes to developmental silencing of imprinted genes in the brain. Kernohan KD, et al. Dev Cell, 2010 Feb 16. PMID 20159591.Regulation of ICP0-null mutant herpes simplex virus type 1 infection by ND10 components ATRX and hDaxx. Lukashchuk V, et al. J Virol, 2010 Apr. PMID 20147399.ATRX interacts with H3.3 in maintaining telomere structural integrity in pluripotent embryonic stem cells. Wong LH, et al. Genome Res, 2010 Mar. PMID 20110566.Strong relationship between NT-proXNP levels and cardiac output following cardiac surgery in neonates and infants. Breuer T, et al. Acta Anaesthesiol Scand, 2010 Apr. PMID 19919584.Partial ATRX gene duplication causes ATR-X syndrome. Cohn DM, et al. Am J Med Genet A, 2009 Oct. PMID 19764021.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



Detection limit for recombinant GST tagged ATRX is approximately 0.1ng/ml as a capture antibody.