

## **Product datasheet for TL306482**

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## **ATRX Human shRNA Plasmid Kit (Locus ID 546)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** ATRX Human shRNA Plasmid Kit (Locus ID 546)

Locus ID: 546

Synonyms: JMS; MRX52; RAD54; RAD54L; XH2; XNP; ZNF-HX

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: ATRX - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 546). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 000489, NM 138270, NM 138271, NM 000489.1, NM 000489.2, NM 000489.3,

NM 000489.4, NM 138270.1, NM 138270.2, NM 138270.3, NM 138271.1, BC002521,

BC156296, BM714186, NM 000489.6

UniProt ID: P46100

**Summary:** The protein encoded by this gene contains an ATPase/helicase domain, and thus it belongs to

the SWI/SNF family of chromatin remodeling proteins. 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. Mutations in this gene are associated with X-linked

syndromes exhibiting cognitive disabilities as well as 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. Multiple alternatively spliced transcript variants

encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2017]

**shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).