

## **Product datasheet for TL504543**

## OriGene Technologies, Inc.

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## **Arid5b Mouse shRNA Plasmid (Locus ID 71371)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Arid5b Mouse shRNA Plasmid (Locus ID 71371)

**Locus ID:** 71371

**Synonyms:** 4930580B11; 5430435G07Rik; Al467247; Desrt; Mrf2; Mrf2alpha; Mrf2beta

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** Arid5b - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 71371).

5µg purified plasmid DNA per construct

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

RefSeq: NM 023598, NM 023598.1, NM 023598.2, BC082312, BC165988

UniProt ID: Q8BM75

Summary: Transcription coactivator that binds to the 5'-AATA[CT]-3' core sequence and plays a key role

in adipogenesis and liver development. Acts by forming a complex with phosphorylated PHF2, which mediates demethylation at Lys-337, leading to target the PHF2-ARID5B complex to target promoters, where PHF2 mediates demethylation of dimethylated 'Lys-9' of histone H3 (H3K9me2), followed by transcription activation of target genes. The PHF2-ARID5B complex acts as a coactivator of HNF4A in liver (By similarity). Required for adipogenesis: regulates triglyceride metabolism in adipocytes by regulating expression of adipogenic genes. Overexpression leads to induction of smooth muscle marker genes, suggesting that it may

also act as a regulator of smooth muscle cell differentiation and proliferation.

[UniProtKB/Swiss-Prot Function]

**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 custom shRNA service.





## 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).