

## **Product datasheet for TR516027**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Dyrk1a Mouse shRNA Plasmid (Locus ID 13548)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Dyrk1a Mouse shRNA Plasmid (Locus ID 13548)

**Locus ID:** 13548

**Synonyms:** 2310043008Rik; D16Ertd272e; D16Ertd493e; Dyrk; ENSMUSG00000074897; Gm10783; mmb;

Mnbh; Mp86

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Dyrk1a - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

13548). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC129888</u>, <u>BC129889</u>, <u>NM 001113389</u>, <u>NM 001347731</u>, <u>NM 007890</u>, <u>NM 007890.1</u>,

NM 007890.2, NM 001113389.1, BC138716, BC034550, BC048837, BC145405

UniProt ID: Q61214

**Summary:** Dual-specificity kinase which possesses both serine/threonine and tyrosine kinase activities.

May play a role in a signaling pathway regulating nuclear functions of cell proliferation. Modulates alternative splicing by phosphorylating the splice factor SRSF6 (By similarity). Exhibits a substrate preference for proline at position P+1 and arginine at position P-3. Has pro-survival function and negatively regulates the apoptotic process. Promotes cell survival upon genotoxic stress through phosphorylation of SIRT1. This in turn inhibits TP53 activity

and apoptosis (PubMed:20167603).[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 <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).