

## **Product datasheet for TR500196**

**Bckdhb Mouse shRNA Plasmid (Locus ID 12040)** 

## **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** Bckdhb Mouse shRNA Plasmid (Locus ID 12040)

**Locus ID:** 12040

Synonyms: BCKDE1B; BCKDH E1-beta

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

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

12040). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC064099</u>, <u>NM 199195</u>, <u>NM 199195.1</u>

UniProt ID: Q6P3A8

**Summary:** This gene encodes the beta chain of the branched chain alpha ketoacid dehydrogenase

(Bckdh) complex. The encoded protein exists in a heterotetrameric complex containing the Bckdh alpha subunit to form the E1 catalytic component of Bckdh complex. The Bckdh complex catalyzes the oxidative decarboxylation of branched chain ketoacids to their corresponding acyl-CoA esters, during the catabolism of leucine, isoleucine and valine. In humans, certain mutations in this gene cause maple syrup urine disease. Alternative splicing results in multiple transcript variants encoding different isoforms. A pseudogene for this

gene has been identified. [provided by RefSeq, Apr 2015]

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>.



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com





## 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).