

## **Product datasheet for TL513159**

## **Bicd2 Mouse shRNA Plasmid (Locus ID 76895)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Bicd2 Mouse shRNA Plasmid (Locus ID 76895)

**Locus ID:** 76895

**Synonyms:** 0610027D24Rik; 1110005D12Rik; AA408834; mKIAA0699

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** Bicd2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 76895).

5µg purified plasmid DNA per construct

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

RefSeq: BC032198, NM 001039179, NM 001039180, NM 029791, NM 001039180.1, NM 029791.1,

NM 029791.2, NM 029791.3, NM 029791.4, NM 001039179.1, NM 001039179.2

UniProt ID: Q921C5

Summary: Acts as an adapter protein linking the dynein motor complex to various cargos and converts

dynein from a non-processive to a highly processive motor in the presence of dynactin. Facilitates and stabilizes the interaction between dynein and dynactin and activates dynein processivity (the ability to move along a microtubule for a long distance without falling off the

track) (PubMed:11483508, PubMed:25035494, PubMed:24986880, PubMed:22956769).

Facilitates the binding of RAB6A to the Golgi by stabilizing its GTP-bound form

(PubMed:25962623). Regulates coat complex coatomer protein I (COPI)-independent Golgiendoplasmic reticulum transport via its interaction with RAB6A and recruitment of the dynein-dynactin motor complex (PubMed:12447383, PubMed:25962623). Contributes to nuclear and centrosomal positioning prior to mitotic entry through regulation of both dynein and kinesin-1. During G2 phase of the cell cycle, associates with RANBP2 at the nuclear pores and recruits dynein and dynactin to the nuclear envelope to ensure proper positioning of the

nucleus relative to centrosomes prior to the onset of mitosis (PubMed:20386726).

[UniProtKB/Swiss-Prot Function]



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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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).