

## **Product datasheet for TL511078**

## OriGene Technologies, Inc.

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## Wdfy3 Mouse shRNA Plasmid (Locus ID 72145)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Wdfy3 Mouse shRNA Plasmid (Locus ID 72145)

**Locus ID:** 72145

**Synonyms:** 2610509D04Rik; ALFY; AW319683; B930017C24; Bchs; BWF1; D5Ertd66e; Ggtb3; mKIAA0993;

ZFYVE25

**Vector:** pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Wdfy3 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 72145).

5µg purified plasmid DNA per construct

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

RefSeq: <u>BC058274</u>, <u>NM 172882</u>, <u>BC014824</u>, <u>BC034123</u>, <u>BC049866</u>

Summary: Required for selective macroautophagy (aggrephagy). Acts as an adapter protein by linking

specific proteins destined for degradation to the core autophagic machinery members, such as the ATG5-ATG12-ATG16L E3-like ligase, SQSTM1 and LC3. Involved in the formation and autophagic degradation of cytoplasmic ubiquitin-containing inclusions (p62 bodies,

ALIS/aggresome-like induced structures) (By similarity). Important for normal brain

development (PubMed:25198012, PubMed:27648578). Essential for the formation of axonal tracts throughout the brain and spinal cord, including the formation of the major forebrain commissures. Involved in the ability of neural cells to respond to guidance cues. Required for cortical neurons to respond to the trophic effects of netrin-1/NTN1 (PubMed:27648578). Regulates Wnt signaling through the removal of DVL3 aggregates, likely in an autophagy-dependent manner. This process may be important for the determination of brain size during embryonic development (By similarity). May regulate osteoclastogenesis by acting on the TNFSF11/RANKL - TRAF6 pathway (PubMed:27330028). After cytokinetic abscission, involved

in midbody remnant degradation. In vitro strongly binds to phosphatidylinositol 3-phosphate (PtdIns3P) (By similarity).[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).