

Product datasheet for TR505483

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com

OriGene Technologies, Inc.

https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Gabarapl2 Mouse shRNA Plasmid (Locus ID 93739)

Product data:

Product Type: shRNA Plasmids

Product Name: Gabarapl2 Mouse shRNA Plasmid (Locus ID 93739)

Locus ID: 93739

Synonyms: 0610012F20Rik; 2900019O08Rik; Al173605; GATE-16; Gef2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Gabarapl2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID

= 93739). 5µg purified plasmid DNA per construct

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

RefSeq: BC026798, BC081436, NM 026693, NM 026693.1, NM 026693.2, NM 026693.3, NM 026693.4,

NM 026693.5

UniProt ID: P60521

Summary: Ubiquitin-like modifier involved in intra-Golgi traffic. Modulates intra-Golgi transport through

coupling between NSF activity and SNAREs activation. It first stimulates the ATPase activity of

NSF which in turn stimulates the association with GOSR1 (By similarity). Involved in

autophagy. Plays a role in mitophagy which contributes to regulate mitochondrial quantity

and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Whereas LC3s are involved in

elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a

later stage in autophagosome maturation.[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).