

OriGene Technologies, Inc.

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Product datasheet for TR505435

Gpr137b Mouse shRNA Plasmid (Locus ID 83924)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Gpr137b Mouse shRNA Plasmid (Locus ID 83924)
Locus ID:	83924
Synonyms:	Al788917; AU016435; AW546472; C80550; C80741; C730041E01; D13Abb1e; Tm7sf1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Gpr137b - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 83924). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC003212, NM 031999, NM 031999.1, NM 031999.2</u>
UniProt ID:	<u>Q8BNQ3</u>
Summary:	Lysosomal integral membrane protein that regulates the localization and activity of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids. Interacts with Rag GTPases and increases the lysosomial localization and activity of Rag GTPases and thereby regulates mTORC1 translocation and activity in lysosome. Involved in the regulation of lysosomal morphology and autophagy (By similarity). Acts also as a negative regulator of osteoclast activity (PubMed:31173907). Involved in interleukin-4- induced M2 macrophage polarization (PubMed:30595385).[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> .



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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).

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