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Product datasheet for TR511741

Gpc3 Mouse shRNA Plasmid (Locus ID 14734)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Gpc3 Mouse shRNA Plasmid (Locus ID 14734)
Locus ID:	14734
Synonyms:	OCI-5
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Gpc3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 14734). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC036126, NM_016697, NM_016697.1, NM_016697.2, NM_016697.3
UniProt ID:	Q8CFZ4
Summary:	Cell surface proteoglycan that bears heparan sulfate (By similarity). Negatively regulates the hedgehog signaling pathway when attached via the GPI-anchor to the cell surface by competing with the hedgehog receptor PTC1 for binding to hedgehog proteins (PubMed:18477453, PubMed:23665349). Binding to the hedgehog protein SHH triggers internalization of the complex by endocytosis and its subsequent lysosomal degradation (PubMed:18477453). Positively regulates the canonical Wnt signaling pathway by binding to the Wnt receptor Frizzled and stimulating the binding of the Frizzled receptor to Wnt ligands (By similarity). Positively regulates the non-canonical Wnt signaling pathway (PubMed:15537637). Binds to CD81 which decreases the availability of free CD81 for binding to the transcriptional repressor HHEX, resulting in nuclear translocation of HHEX and transcriptional repression (PubMed:23665349). Inhibits the dipeptidyl peptidase activity of DPP4 (By similarity). Plays a role in limb patterning and skeletal development by controlling the cellular response to BMP4 (PubMed:10964473). Modulates the effects of growth factors BMP2, BMP7 and FGF7 on renal branching morphogenesis (PubMed:11180950). Required for coronary vascular development (PubMed:19733558). Plays a role in regulating cell movements during gastrulation (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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).