Product datasheet for TR514173

Adgra2 Mouse shRNA Plasmid (Locus ID 78560)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Adgra2 Mouse shRNA Plasmid (Locus ID 78560)
Locus ID:	78560
Synonyms:	8430414O08Rik; 9530074E10Rik; Gpr124; mKIAA1531; Tem5
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Adgra2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 78560). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_054044, NM_054044.1, NM_054044.2, BC138451, BC138452
UniProt ID:	Q91ZV8
Summary:	Endothelial receptor which functions together with RECK to enable brain endothelial cells to selectively respond to Wnt7 signals (WNT7A or WNT7B) (PubMed:25373781, PubMed:25558062, PubMed:28803732). Plays a key role in Wnt7-specific responses, such as endothelial cell sprouting and migration in the forebrain and neural tube, and establishment of the blood-brain barrier (PubMed:21071672, PubMed:21282641, PubMed:21421844, PubMed:25373781, PubMed:28288111). Acts as a Wnt7-specific coactivator of canonical Wnt signaling: required to deliver RECK-bound Wnt7 to frizzled by assembling a higher-order RECK-ADGRA2-Fzd-LRP5-LRP6 complex (By similarity). ADGRA2-tethering function does not rely on its G-protein coupled receptor (GPCR) structure but instead on its combined capacity to interact with RECK extracellularly and recruit the Dishevelled scaffolding protein intracellularly (By similarity). Binds to the glycosaminoglycans heparin, heparin sulfate, chondroitin sulfate and dermatan sulfate (By similarity).[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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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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).