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Product datasheet for TG506724

Cyp2c44 Mouse shRNA Plasmid (Locus ID 226143)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Cyp2c44 Mouse shRNA Plasmid (Locus ID 226143)
Locus ID:	226143
Synonyms:	AW107714; b2b386Clo; BC034834; Cyp2c44
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cyp2c44 - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 226143). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	BC025819, BC026766, BC034834, NM_001001446, NM_001167905, NM_001001446.1, NM_001001446.2, NM_001001446.3, NM_001167905.1, BC022141, BC024068
UniProt ID:	A0A1D5RLI1
Summary:	A cytochrome P450 monooxygenase involved in polyunsaturated fatty acids (PUFAs) metabolism and signaling (PubMed:15084647). Catalyzes preferentially the epoxidation of double bonds of PUFAs (PubMed:15084647). Converts arachidonoic acid primarily to stereospecific products (8R,9S)-epoxyeicosatrienoate (EET) and (11R,12S)-EET (PubMed:15084647). Via EETs may inhibit the epithelial sodium channels in nephron segments, leading to increased sodium excretion and stable systemic blood pressure (PubMed:24966089, PubMed:24368771). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase) (PubMed:15084647).[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).