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Product datasheet for TR311107

Constitutive androstane receptor (NR1I3) Human shRNA Plasmid Kit (Locus ID 9970)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Constitutive androstane receptor (NR1I3) Human shRNA Plasmid Kit (Locus ID 9970)
Locus ID:	9970
Synonyms:	CAR; CAR1; MB67
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	NR1I3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 9970). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001077469, NM_001077470, NM_001077471, NM_001077472, NM_001077473, NM_001077474, NM_001077475, NM_001077476, NM_001077477, NM_001077478, NM_001077479, NM_001077480, NM_001077481, NM_001077482, NM_005122, NM_001077480.1, NM_001077480.2, NM_001077470.1, NM_001077470.2, NM_001077473.1, NM_001077473.2, NM_001077476.1, NM_001077476.2, NM_001077479.1, NM_001077479.2, NM_001077481.1, NM_001077481.2, NM_001077482.1, NM_005122.1, NM_005122.2, NM_005122.3, NM_005122.4, NM_001077469.1, NM_001077469.2, NM_001077471.1, NM_001077471.2, NM_001077472.1, NM_001077472.2, NM_001077474.1, NM_001077474.2, NM_001077475.1, NM_001077475.2, NM_001077477.1, NM_001077477.2, NM_001077478.1, NM_001077478.2, BC069626, BC069626.1, BC121120, BC121121, BC030972, BC069651, NM_001077477.3, NM_005122.5, NM_001077475.3, NM_001077472.3, NM_001077476.3, NM_001077470.3, NM_001077479.3, NM_001077478.3, NM_001077474.3, NM_001077469.3, NM_001077480.3, NM_001077473.3, NM_001077481.3, NM_001077471.3
UniProt ID:	Q14994

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Summary:

This gene encodes a member of the nuclear receptor superfamily, and is a key regulator of xenobiotic and endobiotic metabolism. The protein binds to DNA as a monomer or a heterodimer with the retinoid X receptor and regulates the transcription of target genes involved in drug metabolism and bilirubin clearance, such as cytochrome P450 family members. Unlike most nuclear receptors, this transcriptional regulator is constitutively active in the absence of ligand but is regulated by both agonists and inverse agonists. Ligand binding results in translocation of this protein to the nucleus, where it activates or represses target gene transcription. These ligands include bilirubin, a variety of foreign compounds, steroid hormones, and prescription drugs. In addition to drug metabolism, the CAR protein is also reported to regulate genes involved in glucose metabolism, lipid metabolism, cell proliferation, and circadian clock regulation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2020]

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).