

# Product datasheet for TR306766

## ALDH1A2 Human shRNA Plasmid Kit (Locus ID 8854)

## **Product data:**

### OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	ALDH1A2 Human shRNA Plasmid Kit (Locus ID 8854)
Locus ID:	8854
Synonyms:	RALDH(II); RALDH2; RALDH2-T
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ALDH1A2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 8854). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 001206897, NM 003888, NM 170696, NM 170697, NM 170696.1, NM 170696.2,</u> <u>NM 170697.1, NM 170697.2, NM 003888.1, NM 003888.2, NM 003888.3, NM 001206897.1,</u> <u>BC030589, BC030589.2, NM 170696.3, NM 170697.3, NM 003888.4</u>
UniProt ID:	<u>094788</u>
Summary:	This protein belongs to the aldehyde dehydrogenase family of proteins. The product of this gene is an enzyme that catalyzes the synthesis of retinoic acid (RA) from retinaldehyde. Retinoic acid, the active derivative of vitamin A (retinol), is a hormonal signaling molecule that functions in developing and adult tissues. The studies of a similar mouse gene suggest that this enzyme and the cytochrome CYP26A1, concurrently establish local embryonic retinoic acid levels which facilitate posterior organ development and prevent spina bifida. Four transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, May 2011]
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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### **GRIGENE** ALDH1A2 Human shRNA Plasmid Kit (Locus ID 8854) – TR306766

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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