

Product datasheet for TL314857

OriGene Technologies, Inc.

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AKR1C3 Human shRNA Plasmid Kit (Locus ID 8644)

Product data:

Product Type: shRNA Plasmids

Product Name: AKR1C3 Human shRNA Plasmid Kit (Locus ID 8644)

Locus ID: 8644

Synonyms: DD3; DDX; HA1753; HAKRB; HAKRe; hluPGFS; HSD17B5; PGFS

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: AKR1C3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 8644).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>NM 001253908, NM 001253909, NM 003739, NM 003739.1, NM 003739.2, NM 003739.3,</u>

NM 003739.4, NM 003739.5, NM 001253909.1, NM 001253908.1, BC001479, BC001479.2,

BC019230, NM 001253909.2, NM 003739.6

UniProt ID: P42330

Summary: This gene encodes a member of the aldo/keto reductase superfamily, which consists of more

than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF2 to PGD2. It may play an important role in the pathogenesis of allergic

diseases such as asthma, and may also have a role in controlling cell growth and/or

differentiation. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 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>.







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).