

Product datasheet for TR306751

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

ALOXE3 Human shRNA Plasmid Kit (Locus ID 59344)

Product data:

Product Type: shRNA Plasmids

Product Name: ALOXE3 Human shRNA Plasmid Kit (Locus ID 59344)

Locus ID:

ARCI3; E-LOX; eLOX-3; eLOX3 Synonyms:

Vector: pRS (TR20003)

E. coli Selection: Ampicillin Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

ALOXE3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

59344). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

NM 001165960, NM 021628, NM 021628.1, NM 021628.2, NM 001165960.1, BC104724, RefSeq:

BC101938, BC101939, BC103508, NM 001369446, NM 021628.3

UniProt ID: Q9BYJ1

Summary: This gene is a member of the lipoxygenase family, which are catabolized by arachidonic acid-

> derived compounds. The encoded enzyme is a hydroperoxide isomerase that synthesizes a unique type of epoxy alcohol (8R-hydroxy-11R,12R-epoxyeicosa-5Z,9E,14Z-trienoic acid) from 12R-hydroperoxyeicosatetraenoic acid (12R-HPETE). This epoxy alcohol can activate the the nuclear receptor peroxisome proliferator-activated receptor alpha (PPARalpha), which is implicated in epidermal differentiation. Loss of function of the enzyme encoded by this gene results in ichthyosis, implicating the function of this gene in the differentiation of human skin. This gene is part of a cluster of lipoxygenase genes on 17p13.1. Mutations in this gene result in nonbullous congenital ichthyosiform erythroderma (NCIE). Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Sep 2009]

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).