

## **Product datasheet for TR306740**

## ALX4 Human shRNA Plasmid Kit (Locus ID 60529)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** ALX4 Human shRNA Plasmid Kit (Locus ID 60529)

**Locus ID:** 60529

Synonyms: CRS5; FND2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

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Format: Retroviral plasmids

Components: ALX4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

60529). 5µg purified plasmid DNA per construct

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

RefSeq: NM 021926, NM 021926.1, NM 021926.2, NM 021926.3, BC166622, NM 021926.4

UniProt ID: Q9H161

**Summary:** This gene encodes a paired-like homeodomain transcription factor expressed in the

mesenchyme of developing bones, limbs, hair, teeth, and mammary tissue. Mutations in this gene cause parietal foramina 2 (PFM2); an autosomal dominant disease characterized by deficient ossification of the parietal bones. Mutations in this gene also cause a form of frontonasal dysplasia with alopecia and hypogonadism; suggesting a role for this gene in craniofacial development, mesenchymal-epithelial communication, and hair follicle

development. Deletion of a segment of chromosome 11 containing this gene, del(11)(p11p12), causes Potocki-Shaffer syndrome (PSS); a syndrome characterized by craniofacial anomalies, cognitive disability, multiple exostoses, and genital abnormalities in males. In mouse, this gene has been shown to use dual translation initiation sites located 16 codons apart.

[provided by RefSeq, Oct 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 <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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## 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).