

## **Product datasheet for TL317542**

## OriGene Technologies, Inc.

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## **CXXC4 Human shRNA Plasmid Kit (Locus ID 80319)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** CXXC4 Human shRNA Plasmid Kit (Locus ID 80319)

Locus ID: 80319
Synonyms: IDAX

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** CXXC4 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 80319).

5µg purified plasmid DNA per construct

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

RefSeq: NM 025212, NR 132741, NM 025212.1, NM 025212.3, BC119751, BC119752

Summary: This gene encodes a CXXC-type zinc finger domain-containing protein that functions as an

antagonist of the canonical wingless/integrated signaling pathway. The encoded protein negatively regulates wingless/integrated signaling through interaction with the post synaptic density protein/ Drosophila disc large tumor suppressor/ zonula occludens-1 protein domain of Dishevelled, a scaffolding protein required for the stabilization of the transcriptional coactivator beta-catenin. In addition, the CXXC domain of this protein has been shown to bind unmethylated CpG dinucleotides, localize to promoters and CpG islands, and interact with the catalytic domain of methylcytosine dioxygenase ten-eleven-translocation 2, an iron and alpha-ketoglutarate-dependent dioxygenase that modifies the methylation status of DNA. In humans, a mutation in this gene has been associated with development of malignant renal cell carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq,

Sep 2015]

**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).