

Product datasheet for TL300016

OriGene Technologies, Inc.

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ZRANB3 Human shRNA Plasmid Kit (Locus ID 84083)

Product data:

Product Type: shRNA Plasmids

Product Name: ZRANB3 Human shRNA Plasmid Kit (Locus ID 84083)

Locus ID: 84083

Synonyms: 4933425L19Rik; AH2

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: ZRANB3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

84083). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001286568, NM 001286569, NM 032143.1, NM 032143.2, NM 032143.3,

NM 001286569.1, NM 001286568.1, BC089429, NM 032143.4, NM 001286568.2

UniProt ID: Q5FWF4

Summary: DNA annealing helicase and endonuclease required to maintain genome stability at stalled or

collapsed replication forks by facilitating fork restart and limiting inappropriate

recombination that could occur during template switching events (PubMed:21078962,

PubMed:22704558, PubMed:22705370, PubMed:22759634, PubMed:26884333). Recruited to the sites of stalled DNA replication by polyubiquitinated PCNA and acts as a structure-specific endonuclease that cleaves the replication fork D-loop intermediate, generating an accessible 3'-OH group in the template of the leading strand, which is amenable to extension by DNA polymerase (PubMed:22759634). In addition to endonuclease activity, also catalyzes the fork regression via annealing helicase activity in order to prevent disintegration of the replication fork and the formation of double-strand breaks (PubMed:22705370, PubMed:22704558).

[UniProtKB/Swiss-Prot Function]

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).