

Product datasheet for TF320299

OriGene Technologies, Inc.

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p15 INK4b (CDKN2B) Human shRNA Plasmid Kit (Locus ID 1030)

Product data:

Product Type: shRNA Plasmids

Product Name: p15 INK4b (CDKN2B) Human shRNA Plasmid Kit (Locus ID 1030)

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Synonyms: CDK4I; INK4B; MTS2; P15; p15INK4b; TP15

Vector: pRFP-C-RS (TR30014)

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

Mammalian Cell

Puromycin

Selection:

Format: Retroviral plasmids

Components: CDKN2B - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 1030).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 004936, NM 078487, NM 004936.1, NM 004936.2, NM 004936.3, NM 078487.1,

NM 078487.2, BC014469, BC014469.1, BC018984, NM 004936.4

UniProt ID: P42772

Summary: This gene lies adjacent to the tumor suppressor gene CDKN2A in a region that is frequently

mutated and deleted in a wide variety of tumors. This gene encodes a cyclin-dependent kinase inhibitor, which forms a complex with CDK4 or CDK6, and prevents the activation of the CDK kinases, thus the encoded protein functions as a cell growth regulator that controls cell cycle G1 progression. The expression of this gene was found to be dramatically induced

by TGF beta, which suggested its role in the TGF beta induced growth inhibition. Two alternatively spliced transcript variants of this gene, which encode distinct proteins, have

been reported. [provided by RefSeq, Jul 2008]

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).