

Product datasheet for TR505329

OriGene Technologies, Inc.

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Cdk5rap3 Mouse shRNA Plasmid (Locus ID 80280)

Product data:

Product Type: shRNA Plasmids

Product Name: Cdk5rap3 Mouse shRNA Plasmid (Locus ID 80280)

Locus ID: 80280

Synonyms: 1810007E24Rik; BC002318; C53; C81486; HSF-27; IC53; LZAP; MST016

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Cdk5rap3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

80280). 5µg purified plasmid DNA per construct

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

RefSeq: BC002318, NM 001308183, NM 030248, NM 030248.1, NM 030248.2, BM211958,

NM 001363255, NM 001363256

UniProt ID: Q99LM2

Summary: Probable tumor suppressor initially identified as a CDK5R1 interactor controlling cell

proliferation. Negatively regulates NF-kappa-B-mediated gene transcription through the control of RELA phosphorylation. Also regulates mitotic G2/M transition checkpoint and mitotic G2 DNA damage checkpoint. Through its interaction with CDKN2A/ARF and MDM2 may induce MDM2-dependent p53/TP53 ubiquitination, stabilization and activation in the nucleus, thereby promoting G1 cell cycle arrest and inhibition of cell proliferation. May play a role in the unfolded protein response, mediating the ufmylation of multiple proteins in response to endoplasmic reticulum stress. May also play a role in the rupture of the nuclear envelope during apoptosis. May regulate MAPK14 activity by regulating its dephosphorylation

by PPM1D/WIP1.[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).