

Product datasheet for TR307097

OriGene Technologies, Inc.

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DIP13B (APPL2) Human shRNA Plasmid Kit (Locus ID 55198)

Product data:

Product Type: shRNA Plasmids

Product Name: DIP13B (APPL2) Human shRNA Plasmid Kit (Locus ID 55198)

Locus ID: 55198
Synonyms: DIP13B

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: APPL2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

55198). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001251904, NM 001251905, NM 018171, NM 018171.1, NM 018171.2, NM 018171.3,

NM 001251905.1, NM 001251904.1, BC033731, BC033731.1, BC028008, NM 018171.5

UniProt ID: Q8NEU8

Summary: The protein encoded by this gene is one of two effectors of the small GTPase RAB5A/Rab5,

which are involved in a signal transduction pathway. Both effectors contain an N-terminal Bin/Amphiphysin/Rvs (BAR) domain, a central pleckstrin homology (PH) domain, and a C-terminal phosphotyrosine binding (PTB) domain, and they bind the Rab5 through the BAR domain. They are associated with endosomal membranes and can be translocated to the nucleus in response to the EGF stimulus. They interact with the NuRD/MeCP1 complex (nucleosome remodeling and deacetylase /methyl-CpG-binding protein 1 complex) and are required for efficient cell proliferation. A chromosomal aberration t(12;22)(q24.1;q13.3) involving this gene and the PSAP2 gene results in 22q13.3 deletion syndrome, also known as

Phelan-McDermid syndrome. [provided by RefSeq, Oct 2011]

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).