

Product datasheet for TR303026

OriGene Technologies, Inc.

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NAT13 (NAA50) Human shRNA Plasmid Kit (Locus ID 80218)

Product data:

Product Type: shRNA Plasmids

Product Name: NAT13 (NAA50) Human shRNA Plasmid Kit (Locus ID 80218)

Locus ID: 80218

Synonyms: hNaa50p; MAK3; NAT5; NAT5P; NAT13; NAT13P; SAN

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: NAA50 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

80218). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001308445, NM 025146, NM 025146.1, NM 025146.2, NM 025146.3, BC012731,

BC012731.2, BM831426, NM 025146.4

UniProt ID: Q9GZZ1



Summary:

N-alpha-acetyltransferase that acetylates the N-terminus of proteins that retain their initiating methionine (PubMed:19744929, PubMed:22311970, PubMed:21900231, PubMed:27484799). Has a broad substrate specificity: able to acetylate the initiator methionine of most peptides, except for those with a proline in second position (PubMed:27484799). Also displays N-epsilon-acetyltransferase activity by mediating acetylation of the side chain of specific lysines on proteins (PubMed:19744929). Autoacetylates in vivo (PubMed:19744929). The relevance of N-epsilon-acetyltransferase activity is however unclear: able to acetylate H4 in vitro, but this result has not been confirmed in vivo (PubMed:19744929). Component of a N-alpha-acetyltransferase complex containing NAA10 and NAA15, but NAA50 does not influence the acetyltransferase activity of NAA10: this multiprotein complex probably constitutes the major contributor for N-terminal acetylation at the ribosome exit tunnel, with NAA10 acetylating all amino termini that are devoid of methionine and NAA50 acetylating other peptides (PubMed:16507339, PubMed:27484799). Required for sister chromatid cohesion during mitosis by promoting binding of CDCA5/sororin to cohesin: may act by counteracting the function of NAA10 (PubMed:17502424, PubMed:27422821).[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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).