

Product datasheet for TR307003

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

NYREN18 (NUB1) Human shRNA Plasmid Kit (Locus ID 51667)

Product data:

Product Type: shRNA Plasmids

Product Name: NYREN18 (NUB1) Human shRNA Plasmid Kit (Locus ID 51667)

Locus ID:

BS4; NUB1L; NYREN18 Synonyms:

Vector: pRS (TR20003)

E. coli Selection: Ampicillin Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

NUB1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

51667). 5µg purified plasmid DNA per construct

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

NM 001243351, NM 016118, NM 016118.1, NM 016118.2, NM 016118.3, NM 016118.4, RefSeq:

NM 001243351.1, BC046354, BC046354.2, BC034716, NM 001363529

UniProt ID: O9Y5A7

Summary: This gene encodes a protein that functions as a negative regulator of NEDD8, a ubiquitin-like

protein that conjugates with cullin family members in order to regulate vital biological events.

The protein encoded by this gene regulates the NEDD8 conjugation system post-

transcriptionally by recruiting NEDD8 and its conjugates to the proteasome for degradation. This protein interacts with the product of the AIPL1 gene, which is associated with Leber congenital amaurosis, an inherited retinopathy, and mutations in that gene can abolish interaction with this protein, which may contribute to the pathogenesis. This protein is also known to accumulate in Lewy bodies in Parkinson's disease and dementia with Lewy bodies,

and in glial cytoplasmic inclusions in multiple system atrophy, with this abnormal

accumulation being specific to alpha-synucleinopathy lesions. Alternative splicing of this gene

results in multiple transcript variants. [provided by RefSeq, Aug 2011]

These shRNA constructs were designed against multiple splice variants at this gene locus. To shRNA Design:

> 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 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).