

Product datasheet for TG311053

NUP98 Human shRNA Plasmid Kit (Locus ID 4928)

Product data:

Product Type: shRNA Plasmids

Product Name: NUP98 Human shRNA Plasmid Kit (Locus ID 4928)

Locus ID: 4928

Synonyms: ADIR2; NUP96; Nup98-96; NUP196

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: NUP98 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 4928).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 005387, NM 016320, NM 139131, NM 139132, NM 139131.1, NM 139131.2,

NM 139131.3, NM 139131.4, NM 016320.2, NM 016320.3, NM 016320.4, NM 005387.1, NM 005387.2, NM 005387.3, NM 005387.4, NM 005387.5, NM 005387.6, NM 139132.1,

NM 139132.2, NM 139132.3, BC041136, BC041136.1, BC012906, NM 001365127,

NM 001365129, NR 157589, NR 157590, NM 001365125, NM 001365126, NM 001365128,

NR 157591, NM 016320.5, NM 139132.4, NM 005387.7, NM 139131.5

UniProt ID: P52948

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Summary:

Nuclear pore complexes (NPCs) regulate the transport of macromolecules between the nucleus and cytoplasm, and are composed of many polypeptide subunits, many of which belong to the nucleoporin family. This gene belongs to the nucleoporin gene family and encodes a 186 kDa precursor protein that undergoes autoproteolytic cleavage to generate a 98 kDa nucleoporin and 96 kDa nucleoporin. The 98 kDa nucleoporin contains a Gly-Leu-Phe-Gly (GLGF) repeat domain and participates in many cellular processes, including nuclear import, nuclear export, mitotic progression, and regulation of gene expression. The 96 kDa nucleoporin is a scaffold component of the NPC. Proteolytic cleavage is important for targeting of the proteins to the NPC. Translocations between this gene and many other partner genes have been observed in different leukemias. Rearrangements typically result in chimeras with the N-terminal GLGF domain of this gene to the C-terminus of the partner gene. Alternative splicing results in multiple transcript variants encoding different isoforms, at least two of which are proteolytically processed. Some variants lack the region that encodes the 96 kDa nucleoporin. [provided by RefSeq, Feb 2016]

shRNA Design:

Performance Guaranteed: 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.

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).