

Product datasheet for TR311220

NDUFS2 Human shRNA Plasmid Kit (Locus ID 4720)

Product data:

Product Type: shRNA Plasmids

Product Name: NDUFS2 Human shRNA Plasmid Kit (Locus ID 4720)

Locus ID: 4720

Synonyms: CI-49; MC1DN6

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: NDUFS2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

4720). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001166159, NM 004550, NM 004550.1, NM 004550.2, NM 004550.3, NM 004550.4,

NM 001166159.1, BC008868, BC000170, BC001456, NM 001166159.2

UniProt ID: <u>075306</u>

Summary: The protein encoded by this gene is a core subunit of the mitochondrial membrane

respiratory chain NADH dehydrogenase (complex I). Mammalian mitochondrial complex I is composed of at least 43 different subunits, 7 of which are encoded by the mitochondrial genome, and the rest are the products of nuclear genes. The iron-sulfur protein fraction of complex I is made up of 7 subunits, including this gene product. Complex I catalyzes the NADH oxidation with concomitant ubiquinone reduction and proton ejection out of the mitochondria. Mutations in this gene are associated with mitochondrial complex I deficiency. Alternatively spliced transcript variants encoding different isoforms have been found for this

gene.[provided by RefSeq, Oct 2009]

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

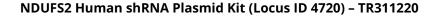
be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.



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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).