

Product datasheet for TR303510

OriGene Technologies, Inc.

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Lamin A (LMNA) Human shRNA Plasmid Kit (Locus ID 4000)

Product data:

Product Type: shRNA Plasmids

Product Name: Lamin A (LMNA) Human shRNA Plasmid Kit (Locus ID 4000)

Locus ID: 4000

Synonyms: CDCD1; CDDC; CMD1A; CMT2B1; EMD2; FPLD; FPLD2; HGPS; IDC; LDP1; LFP; LGMD1B;

LMN1; LMNC; LMNL1; MADA; PRO1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

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

4000). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001257374, NM 001282624, NM 001282625, NM 001282626, NM 005572, NM 170707,

NM 170708, NR 047544, NR 047545, NM 005572.1, NM 005572.2, NM 005572.3,

NM 170707.1, NM 170707.2, NM 170707.3, NM 170708.1, NM 170708.2, NM 001257374.1,

NM 001257374.2, NM 001282624.1, NM 001282625.1, NM 001282626.1, BC000511, BC000511.2, BC014507, BC014507.1, BC003162, BC018863, BC033088, NM 001282626.2, NM 001282624.2, NM 001257374.3, NM 005572.4, NM 170707.4, NM 001282625.2,

NM 170708.4

UniProt ID: P02545

Summary: The nuclear lamina consists of a two-dimensional matrix of proteins located next to the inner

nuclear membrane. The lamin family of proteins make up the matrix and are highly

conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. Vertebrate lamins consist of two types, A and B. Alternative splicing results in multiple transcript variants. Mutations in this gene lead to several diseases: Emery-Dreifuss muscular dystrophy, familial partial lipodystrophy, limb girdle muscular dystrophy, dilated cardiomyopathy, Charcot-Marie-Tooth disease, and

Hutchinson-Gilford progeria syndrome. [provided by RefSeq, Apr 2012]







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).