

Product datasheet for TL313006

FEN1 Human shRNA Plasmid Kit (Locus ID 2237)

Product data:

Product Type: shRNA Plasmids

Product Name: FEN1 Human shRNA Plasmid Kit (Locus ID 2237)

Locus ID: 2237

Synonyms: FEN-1; MF1; RAD2

Vector: pGFP-C-shLenti (TR30023) E. coli Selection:

Chloramphenicol (34 ug/ml) Mammalian Cell Puromycin

Selection:

Format: Lentiviral plasmids

FEN1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 2237). Components:

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

NM 004111, NM 004111.1, NM 004111.2, NM 004111.3, NM 004111.4, NM 004111.5, RefSeq:

BC000323, BM450370, NM 004111.6

UniProt ID: P39748

Summary: The protein encoded by this gene removes 5' overhanging flaps in DNA repair and processes

> the 5' ends of Okazaki fragments in lagging strand DNA synthesis. Direct physical interaction between this protein and AP endonuclease 1 during long-patch base excision repair provides coordinated loading of the proteins onto the substrate, thus passing the substrate from one enzyme to another. The protein is a member of the XPG/RAD2 endonuclease family and is one of ten proteins essential for cell-free DNA replication. DNA secondary structure can inhibit flap processing at certain trinucleotide repeats in a length-dependent manner by concealing the 5' end of the flap that is necessary for both binding and cleavage by the protein encoded by this gene. Therefore, secondary structure can deter the protective function of this protein, leading to site-specific trinucleotide expansions. [provided by RefSeq,

Jul 2008]

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.



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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).