

Product datasheet for TR313177

OriGene Technologies, Inc.

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XPG (ERCC5) Human shRNA Plasmid Kit (Locus ID 2073)

Product data:

Product Type: shRNA Plasmids

Product Name: XPG (ERCC5) Human shRNA Plasmid Kit (Locus ID 2073)

Locus ID: 2073

Synonyms: COFS3; ERCC5-201; ERCM2; UVDR; XPG; XPGC

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: ERCC5 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

2073). 5µg purified plasmid DNA per construct

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

RefSeq: NM 000123, NM 000123.1, NM 000123.2, NM 000123.3, BC031522, BC031522.2,

NM 000123.4

UniProt ID: P28715

Summary: This gene encodes a single-strand specific DNA endonuclease that makes the 3' incision in

DNA excision repair following UV-induced damage. The protein may also function in other cellular processes, including RNA polymerase II transcription, and transcription-coupled DNA repair. Mutations in this gene cause xeroderma pigmentosum complementation group G (XP-

G), which is also referred to as xeroderma pigmentosum VII (XP7), a skin disorder characterized by hypersensitivity to UV light and increased susceptibility for skin cancer

development following UV exposure. Some patients also develop Cockayne syndrome, which is characterized by severe growth defects, cognitive disability, and cachexia. Read-through

transcription exists between this gene and the neighboring upstream BIVM (basic, immunoglobulin-like variable motif containing) gene. [provided by RefSeq, Feb 2011]

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 <u>custom shRNA service</u>.





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).