

## **Product datasheet for TG311338**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### MYH (MUTYH) Human shRNA Plasmid Kit (Locus ID 4595)

#### **Product data:**

**Product Type:** shRNA Plasmids

Product Name: MYH (MUTYH) Human shRNA Plasmid Kit (Locus ID 4595)

Locus ID: 4595 Synonyms: MYH

**Vector:** pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

**Components:** MUTYH - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 4595).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001048171, NM 001048172, NM 001048173, NM 001048174, NM 001128425,

NM 001293190, NM 001293191, NM 001293192, NM 001293195, NM 001293196, NM 012222, NM 001350650, NM 001350651, NR 146882, NR 146883, NM 001048174.1, NM 001048171.1, NM 001048172.1, NM 012222.1, NM 012222.2, NM 001048173.1,

NM 001128425.1, NM 001293192.1, NM 001293196.1, NM 001293195.1, NM 001293191.1, NM 001293190.1, BC003178, BC003178.1, BM926983, NM 001048174.2, NM 001128425.2

UniProt ID: Q9UIF7

**Summary:** This gene encodes a DNA glycosylase involved in oxidative DNA damage repair. The enzyme

excises adenine bases from the DNA backbone at sites where adenine is inappropriately paired with guanine, cytosine, or 8-oxo-7,8-dihydroguanine, a major oxidatively damaged DNA lesion. The protein is localized to the nucleus and mitochondria. This gene product is thought to play a role in signaling apoptosis by the introduction of single-strand breaks following oxidative damage. Mutations in this gene result in heritable predisposition to colorectal cancer, termed MUTYH-associated polyposis (MAP). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2017]

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).