

Product datasheet for TL315046

OriGene Technologies, Inc.

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TPMT Human shRNA Plasmid Kit (Locus ID 7172)

Product data:

Product Type: shRNA Plasmids

Product Name: TPMT Human shRNA Plasmid Kit (Locus ID 7172)

Locus ID: 7172 Synonyms: TPMTD

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: TPMT - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 7172).

5µg purified plasmid DNA per construct

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

RefSeq: <u>NM 000367, NM 001346817, NM 001346818, NM 000367.1, NM 000367.2, NM 000367.3,</u>

NM 000367.4, BC009596, BC009596.1, BC005339

UniProt ID: P51580

Summary: This gene encodes the enzyme that metabolizes thiopurine drugs via S-adenosyl-L-

methionine as the S-methyl donor and S-adenosyl-L-homocysteine as a byproduct.

Thiopurine drugs such as 6-mercaptopurine are used as chemotherapeutic agents. Genetic polymorphisms that affect this enzymatic activity are correlated with variations in sensitivity

and toxicity to such drugs within individuals, causing thiopurine S-methyltransferase deficiency. Related pseudogenes have been identified on chromosomes 3, 18 and X.

[provided by RefSeq, Aug 2014]

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).