

## **Product datasheet for TG501613**

## 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

## **Enpp1 Mouse shRNA Plasmid (Locus ID 18605)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Enpp1 Mouse shRNA Plasmid (Locus ID 18605)

**Locus ID:** 18605

**Synonyms:** 4833416E15Rik; Al428932; C76301; CD203c; E-N; E-NPP 1; E-NPP1; Ly-4; Ly-41; M6S1; N; NPP1;

Npps; P; PC-; PC-1; Pca; Pca-1; Pd; Pdnp1; ttw; twy

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

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

**Components:** Enpp1 - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 18605).

5µg purified plasmid DNA per construct

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

**RefSeq:** NM 008813, NM 008813.1, NM 008813.2, NM 008813.3, NM 008813.4, BC050011, BC160371

Summary: This gene encodes a member of the nucleoside pyrophosphatase/phosphodiesterase family

of enzymes that catalyzes the hydrolysis of pyrophosphate and phosphodiester bonds in nucleotide triphosphates and oligonucleotides, respectively, to generate nucleoside 5'-monophosphates. The encoded protein is a type II transmembrane glycoprotein that negatively regulates bone mineralization. Mice harboring a nonsense mutation in this gene, termed tiptoe walking (ttw), exhibit ectopic ossification of the spinal ligaments. The encoded protein binds to the insulin receptor, inhibits downstream signaling events and induces insulin resistance and glucose tolerance. This gene is located adjacent to a paralog on

chromosome 10. Alternative splicing results in multiple transcript variants encoding different

isoforms. [provided by RefSeq, Apr 2015]

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).