

Product datasheet for TL500315V

OriGene Technologies, Inc.

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Entpd5 Mouse shRNA Lentiviral Particle (Locus ID 12499)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Entpd5 Mouse shRNA Lentiviral Particle (Locus ID 12499)

Locus ID: 12499

Synonyms: Al196558; Al987697; Cd39l4; ER-UDPase; mNTPase; NTPDase-5; NTPDase5; Pcph

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Entpd5 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: BC015247, NM 001026214, NM 001286049, NM 001286058, NM 007647, NM 001026214.1,

NM 001026214.2, NM 007647.1, NM 007647.2, NM 007647.3, NM 001286049.1,

NM 001286058.1

UniProt ID: Q9WUZ9

Summary: Uridine diphosphatase (UDPase) that promotes protein N-glycosylation and ATP level

regulation. UDP hydrolysis promotes protein N-glycosylation and folding in the endoplasmic reticulum, as well as elevated ATP consumption in the cytosol via an ATP hydrolysis cycle. Together with CMPK1 and AK1, constitutes an ATP hydrolysis cycle that converts ATP to AMP and results in a compensatory increase in aerobic glycolysis. The nucleotide hydrolyzing preference is GDP > IDP > UDP, but not any other nucleoside di-, mono- or triphosphates, nor thiamine pyrophosphate. Plays a key role in the AKT1-PTEN signaling pathway by promoting glycolysis in proliferating cells in response to phosphoinositide 3-kinase (PI3K) signaling.

[UniProtKB/Swiss-Prot Function]

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).