

## **Product datasheet for TR307792**

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### PDE12 Human shRNA Plasmid Kit (Locus ID 201626)

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** PDE12 Human shRNA Plasmid Kit (Locus ID 201626)

**Locus ID:** 201626

Synonyms: 2'-PDE; 2-PDE

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: PDE12 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

201626). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001322176, NM 001322177, NM 177966, NM 177966.1, NM 177966.2, NM 177966.3,

NM 177966.4, NM 177966.5, NM 177966.6, BC034978, BM713922, NM 177966.7

UniProt ID: Q6L8Q7

Summary: Enzyme that cleaves 2',5'-phosphodiester bond linking adenosines of the 5'-triphosphorylated

oligoadenylates, triphosphorylated oligoadenylates referred as 2-5A modulates the 2-5A system. Degrades triphosphorylated 2-5A to produce AMP and ATP (PubMed:26055709). Also cleaves 3',5'-phosphodiester bond of oligoadenylates (PubMed:21666256, PubMed:30389976, PubMed:26055709). Plays a role as a negative regulator of the 2-5A system that is one of the

major pathways for antiviral and antitumor functions induced by interferons (IFNs).

Suppression of this enzyme increases cellular 2-5A levels and decreases viral replication in cultured small-airway epithelial cells and Hela cells (PubMed:26055709).[UniProtKB/Swiss-

Prot Function1

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 custom shRNA service.







# 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).