

Product datasheet for TL508927

OriGene Technologies, Inc.

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Parp14 Mouse shRNA Plasmid (Locus ID 547253)

Product data:

Product Type: shRNA Plasmids

Product Name: Parp14 Mouse shRNA Plasmid (Locus ID 547253)

Locus ID: 547253

Synonyms: 1600029O10Rik; ARTD8; BC021340; CoaSt6; mKIAA1268

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Puromycin

Selection:

Format: Lentiviral plasmids

Components: Parp14 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 547253).

5µg purified plasmid DNA per construct

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

RefSeq: <u>NM 001039530</u>, <u>NM 001039530.1</u>, <u>NM 001039530.2</u>, <u>NM 001039530.3</u>, <u>BC138874</u>, <u>BC021340</u>,

BC047386, BC145452

UniProt ID: Q2EMV9

Summary: ADP-ribosyltransferase that mediates mono-ADP-ribosylation of glutamate residues on target

proteins (PubMed:27796300). In contrast to PARP1 and PARP2, it is not able to mediate poly-ADP-ribosylation (By similarity). Catalyzes mono-ADP-ribosylating STAT1 at 'Glu-657' and 'Glu-705' and thus decreasing STAT1 phosphorylation, negatively regulates pro-inflammatory cytokines production in macrophages in response to IFNG stimulation (PubMed:27796300). However, the role of ADP-ribosylation in the prevention of STAT1 phosphorylation has been called into question and it has been suggested that the inhibition of phosphorylation may be the result of sumoylation of STAT1 'Lys-703' (PubMed:29858569). Mono-ADP-ribosylates STAT6; enhancing STAT6-dependent transcription (PubMed:27796300). In macrophages, positively regulates MRC1 expression in response to IL4 stimulation by promoting STAT6 phosphorylation (PubMed:27796300). Mono-ADP-ribosylates PARP9 (By similarity).

[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).