

## **Product datasheet for TL310192**

## 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

## Peroxiredoxin 5 (PRDX5) Human shRNA Plasmid Kit (Locus ID 25824)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Peroxiredoxin 5 (PRDX5) Human shRNA Plasmid Kit (Locus ID 25824)

**Locus ID:** 25824

Synonyms: ACR1; AOEB166; B166; HEL-S-55; PLP; PMP20; PRDX6; prx-V; PRXV; SBBI10

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** PRDX5 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 25824).

5µg purified plasmid DNA per construct

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

RefSeq: NM 012094, NM 181651, NM 181652, NM 001358511, NM 001358516, NM 012094.1,

NM 012094.2, NM 012094.3, NM 012094.4, NM 181652.1, NM 181652.2, NM 181651.1,

NM 181651.2, BC110983, BC110983.1, BC113723, BC113725, BC143849, BC171733

UniProt ID: P30044

**Summary:** This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which

reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein interacts with peroxisome receptor 1 and plays an antioxidant protective role in different tissues under normal conditions and during inflammatory processes. The use of alternate transcription start sites is thought to result in transcript variants that use different in-frame translational start codons to generate isoforms that are targeted to the mitochondrion (isoform L) or peroxisome/cytoplasm (isoform S). Multiple related pseudogenes have been defined for this

gene. [provided by RefSeq, Nov 2017]

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).