

## **Product datasheet for TL503984**

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OriGene Technologies, Inc.

## Polr2g Mouse shRNA Plasmid (Locus ID 67710)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Polr2g Mouse shRNA Plasmid (Locus ID 67710)

**Locus ID:** 67710

**Synonyms:** 2410046K11Rik; A230108L04Rik; C76415; RBP7; Rpo2-7l

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** Polr2g - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 67710).

5µg purified plasmid DNA per construct

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

RefSeq: <u>BC005580</u>, <u>BC055278</u>, <u>NM 026329</u>, <u>NM 026329.1</u>, <u>NM 026329.2</u>

UniProt ID: P62488

**Summary:** DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four

ribonucleoside triphosphates as substrates. Component of RNA polymerase II which synthesizes mRNA precursors and many functional non-coding RNAs. Pol II is the central component of the basal RNA polymerase II transcription machinery. It is composed of mobile elements that move relative to each other. RPB7 is part of a subcomplex with RPB4 that binds to a pocket formed by RPB1, RPB2 and RPB6 at the base of the clamp element. The RBP4-RPB7 subcomplex seems to lock the clamp via RPB7 in the closed conformation thus preventing double-stranded DNA to enter the active site cleft. The RPB4-RPB7 subcomplex

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.

binds single-stranded DNA and RNA. Binds RNA (By similarity).[UniProtKB/Swiss-Prot





## 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).