

## Product datasheet for TR308691

## OriGene Technologies, Inc.

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## 53BP1 (TP53BP1) Human shRNA Plasmid Kit (Locus ID 7158)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** 53BP1 (TP53BP1) Human shRNA Plasmid Kit (Locus ID 7158)

**Locus ID:** 7158

**Synonyms:** 53BP1; p53BP1; p202; TDRD30

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: TP53BP1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

7158). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001141979, NM 001141980, NM 005657, NM 001355001, NM 005657.1, NM 005657.2,

NM 001141979.1, NM 001141980.1, BC017846, BC063119, BC112161, NM 001141979.3,

NM 001141980.3, NM 005657.4

UniProt ID: Q12888

**Summary:** This gene encodes a protein that functions in the DNA double-strand break repair pathway

choice, promoting non-homologous end joining (NHEJ) pathways, and limiting homologous recombination. This protein plays multiple roles in the DNA damage response, including promoting checkpoint signaling following DNA damage, acting as a scaffold for recruitment of DNA damage response proteins to damaged chromatin, and promoting NHEJ pathways by limiting end resection following a double-strand break. These roles are also important during V(D)J recombination, class switch recombination and at unprotected telomeres. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by

RefSeq, Aug 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 <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).