

Product datasheet for **KN318278**

Trp53 Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)
Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA: GFP-puro
Symbol: Trp53
Locus ID: 22059
Components: **KN318278G1**, Trp53 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ACTGTGAGTGGATCTTTTTG
KN318278G2, Trp53 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ATAAGCCTGAAAATGTCTCC
KN318278D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_001127233](#), [NM_011640](#)

UniProt ID:

[P02340](#)

Synonyms:

bbl; bfy; bhy; p44; p53; Tp53

Summary:

This gene encodes tumor protein p53, which responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell lines, where it's believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing transcription activation, DNA-binding, and oligomerization domains. It is postulated to bind to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion, and thus function as a tumor suppressor. Mice deficient for this gene are developmentally normal but are susceptible to spontaneous tumors. Evidence to date shows that this gene contains one promoter, in contrast to alternative promoters of the human gene, and transcribes a few of splice variants which encode different isoforms, although the biological validity or the full-length nature of some variants has not been determined. [provided by RefSeq, Jul 2008]

Product images:

