

## Product datasheet for **KN314163**

### Pten 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:	Pten
Locus ID:	19211
Components:	<p><b>KN314163G1</b>, Pten gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTAACGATCTCTTTGATGA</p> <p><b>KN314163G2</b>, Pten gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ACAGCCGCAGAAATGGATAC</p> <p><b>KN314163D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

#### 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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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 GTTTGCGCAA CGTTGTTGCC ATTGCTACAG GCATCGTGGT GTCACGCTCG TCGTTTGGTA TGGCTTCATT  
 CAGCTCCGGT TCCCAACGAT C

**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\\_008960](#)

**UniProt ID:**

[O08586](#)

**Synonyms:**

2310035O07Rik; A130070J02Rik; AI463227; B430203M17Rik; MMAC1; TEP1

**Summary:**

This gene encodes a phosphatase with dual activity against phospholipids and proteins, and acts as a tumor-suppressor. The protein contains four structural domains, a PIP2-binding domain, a catalytic tensin-type phosphatase domain, a C2 tensin-type domain and a PDZ-binding domain. The protein belongs to the protein tyrosine phosphatase family. Deletion of this gene in mice contribute to tumorigenesis in multiple tissues. [provided by RefSeq, Sep 2015]

Product images:

