

Product datasheet for **KN303984**

Ctsb 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:	Ctsb
Locus ID:	13030
Components:	<p>KN303984G1, Ctsb gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGGCACTGGTCAGTGCCAGC</p> <p>KN303984G2, Ctsb gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTAATCAGGTCATCCGACAG</p> <p>KN303984D, 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 TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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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_007798](#)

UniProt ID:

[P10605](#)

Synonyms:

CB

Summary:

This gene encodes a member of the peptidase C1 family and preproprotein that is proteolytically processed to generate multiple protein products. These products include the cathepsin B light and heavy chains, which can dimerize to generate the double chain form of the enzyme. This enzyme is a lysosomal cysteine protease with both endopeptidase and exopeptidase activity that may play a role in protein turnover. Homozygous knockout mice for this gene exhibit reduced pancreatic damage following induced pancreatitis and reduced hepatocyte apoptosis in a model of liver injury. Pseudogenes of this gene have been identified in the genome. [provided by RefSeq, Aug 2015]

Product images:

