

## Product datasheet for **KN209796**

### TIMP2 Human 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:	TIMP2
Locus ID:	7077
Components:	<p><b>KN209796G1</b>, TIMP2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGCAGCTGCAGGCGTCGGCC</p> <p><b>KN209796G2</b>, TIMP2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGCACCTGCGGCTGGCGCT</p> <p><b>KN209796D</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
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCGT GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
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AAAATAACA AATAGGGGTT CCGCGCAT TCCCGGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCG TTGACGGTCA CAGCTTGCT GTAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
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TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
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AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGAAGACACA

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 GGGGAGAGGC GGTTCGTA TTGGCGCTC TTCGCTTCC TCGCTACTG ACTCGCTGCG CTCGGTCGTT  
 CGGCTGCGG GAGCGGTATC AGCTCACTCA AAGGCGGTAA TACGGTATC CACAGAATCA GGGGATAACG  
 CAGGAAAGAA CATGTGAGCA AAAGGCCAG AAAAGGCCAG GAACCGTAAA AAGGCCCGT TGCTGGCGTT  
 TTTCCATAGG CTCGCCCCC CTGACGAGCA TCACAAAAT CGACGCTCAA GTCAGAGGTG GCGAAACCCG  
 ACAGGACTAT AAAGATACCA GGCGTTTCCC CCTGGAAGCT CCCTCGTGCG CTCTCCTGTT CCGACCTGC  
 CGTTACCG ATACCTGTCC GCCTTTCTCC CTTGGGGAAG CGTGGCGCTT TCTCATAGT CACGCTGTAG  
 GTATCTCAGT TCGGTGTAGG TCGTTCGCTC CAAGCTGGG TGTGTGCACG AACCCCCGT TCAGCCCGAC  
 CGCTGCGCT TATCCGTAA CTATCGTCTT GAGTCCAAC CGGTAAGACA CGACTTATCG CCACTGGCAC

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CAGCCACTGG TAACAGGATT AGCAGAGCGA GGTATGTAGG CGGTGCTACA GAGTTCTTGA AGTGGTGGCC
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AGAGTTGGTA GCTCTTGATC CGGCAAACAA ACCACCGCTG GTAGCGGTGG TTTTTTTGTT TGCAAGCAGC
AGATTACGCG CAGAAAAAAA GGATCTCAAG AAGATCCTTT GATCTTTTCT ACGGGGTCTG ACGCTCAGTG
GAACGAAAAC TCACGTTAAG GGATTTTGGT CATGAGATTA TCAAAAAGGA TCTTCACCTA GATCCTTTTA
AATTAATAAT GAAGTTTAA ATCAATCTAA AGTATATATG AGTAAACTTG GTCTGACAGT TACCAATGCT
TAATCAGTGA GGCACCTATC TCAGCGATCT GTCTATTTTCG TTCATCCATA GTTGCCTGAC TCCCCGTCGT
GTAGATAACT ACGATACGGG AGGGCTTACC ATCTGGCCCC AGTGCTGCAA TGATACCGCG AGAACCACGC
TCACCGGCTC CAGATTTATC AGCAATAAAC CAGCCAGCCG GAAGGGCCGA GCGCAGAAGT GGTCCTGCAA
CTTTATCCGC CTCCATCCAG TCTATTAATT GTTGCCGGGA AGCTAGAGTA AGTAGTTCGC CAGTTAATAG
TTTGCGCAAC GTTGTGGCCA TTGCTACAGG CATCGTGGTG TCACGCTCGT CGTTTGGTAT GGCTTCATTG
AGCTCCGGTT CCAACGATC

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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\\_003255](#)

**UniProt ID:**

[P16035](#)

**Synonyms:**

CSC-21K; DDC8

**Summary:**

This gene is a member of the TIMP gene family. The proteins encoded by this gene family are natural inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix. In addition to an inhibitory role against metalloproteinases, the encoded protein has a unique role among TIMP family members in its ability to directly suppress the proliferation of endothelial cells. As a result, the encoded protein may be critical to the maintenance of tissue homeostasis by suppressing the proliferation of quiescent tissues in response to angiogenic factors, and by inhibiting protease activity in tissues undergoing remodelling of the extracellular matrix. [provided by RefSeq, Jul 2008]

**Product images:**

