

Product datasheet for **KN200757**

SOX2 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:	SOX2
Locus ID:	6657
Components:	<p>KN200757G1, SOX2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGGCCCCGAGCAAACCTTCG</p> <p>KN200757G2, SOX2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGCAACTCCACCGCGGCGG</p> <p>KN200757D, 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**

```
GATCGTTGGG AACCGGAGCT GAATGAAGCC ATACCAAACG ACGAGCGTGA CACCACGATG CCTGTAGCAA
TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGGCAAC AATTAATAGA
CTGGATGGAG GCGGATAAAG TTGCAGGACC ACTTCTGCGC TCGGCCCTTC CGGCTGGCTG GTTTATTGCT
GATAAATCTG GAGCCGGTGA GCGTGGTTCT CGCGGTATCA TTGCAGCACT GGGGCCAGAT GGTAAGCCCT
CCCGTATCGT AGTTATCTAC ACGACGGGGA GTCAGGCAAC TATGGATGAA CGAAATAGAC AGATCGCTGA
GATAGGTGCC TCACTGATTA AGCATTGGTA ACTGTACAGC CAAGTTTACT CATATATACT TTAGATTGAT
TTAAAACCTC ATTTTAAATT TAAAAGGATC TAGGTGAAGA TCCTTTTTGA TAATCTCATG ACCAAAATCC
CTTAACGTGA GTTTTCGTTC CACTGAGCGT CAGACCCCGT AGAAAAGATC AAAGGATCTT CTTGAGATCC
TTTTTTCTG CGCGTAATCT GCTGCTTGCA AACAAAAAAA CCACCGCTAC CAGCGGTGGT TTGTTTGCCG
GATCAAGAGC TACCAACTCT TTTTCCGAAG GTAAGTGGCT TCAGCAGAGC GCAGATACCA AATACTGTTC
TTCTAGTGTA GCCGTAGTTA GGCCACCACT TCAAGAAGTCT TGTAGCACCG CCTACATACC TCGCTCTGCT
AATCCTGTTA CCAGTGGCTG CTGCCAGTGG CGATAAGTCG TGTCTTACCG GGTGGACTC AAGACGATAG
TTACCGGATA AGGCGCAGCG GTCGGGCTGA ACGGGGGGTT CGTGACACACA GCCCAGCTTG GAGCGAACGA
CCTACACCGA ACTGAGATAC CTACAGCGTG AGCTATGAGA AAGCGCCACG CTTCCGGAAG GGAGAAAGGC
GGACAGGTAT CCGGTAAGCG GCAGGGTCCG AACAGGAGAG CGCACGAGGG AGCTTCCAGG GGGAAACGCC
TGGTATCTTT ATAGTCCTGT CGGGTTTCGC CACCTCTGAC TTGAGCGTCG ATTTTGTGTA TGCTCGTCAG
GGGGGCGGAG CCTATGGAAA AACGCCAGCA ACGCGGCCTT TTTACGGTTC CTGGCCTTTT GCTGGCCTTT
TGCTCACATG TTCTTTCCTG CGTTATCCCC TGATTCTGTG GATAACCGTA TTACCGCCTT TGAGTGAGCT
GATACCGCTC GCCGCAGCCG AACGACCGAG CGCAGCGAGT CAGTGAGCGA GGAAGCGGAA GAGCGCCCAA
TACGCAAACC GCCTCTCCCC GCGCGTTGGC CGATTTCATTA ATGCAGCTGG CACGACAGGT TTCCCAGCTG
GAAAGCGGGC AGTGAGCGCA ACGCAATTAA TGTGAGTTAG CTCACTCATT AGGCACCCCA GGCTTTACAC
TTTATGCTTC CGGCTCGTAT GTTGTGTGGA ATTGTGAGCG GATAACAATT TCACACAGGA AACAGCTATG
ACCATGATTA CGCCAAGCTC CTTCTCTTTC CAGCCCTTCC TCTTCTACTG ACTGACTGAC TGGAAGACAC
```



View online »

ACCTCCTGCC CCCTCCTCCC CCGGCCTCCC CCGCGCGGCC GGCGGCGCGG GAGGCCCCCG CCCCTTTCAT
 GCAAAACCCG GCAGCGAGGC TGGGCTCGAG TGGAGGAGCC GCCGCGCGCT GATTGTCGCG TAGAAACCCA
 TTTATTCCCT GACAGCCCCC GTCACATGGA TGGTTGTCTA TTAACCTTGT CAAAAAAGTA TCAGGAGTTG
 TCAAGGCAGA GAAGAGAGTG TTTGCAAAG GGGGAAAGTA GTTTGCTGCC TCTTTAAGC TAGGACTGAG
 AGAAAGAAGA GGAGAGAGAA AGAAAGGGAG AGAAGTTTGA GCCCCAGGCT TAAGCCTTTC CAAAAAATAA
 TAATAACAAT CATCGGCGGC GGCAGGATCG GCCAGAGGAG GAGGGAAGCG CTTTTTTTGA TCCTGATTCC
 AGTTTGCCTC TCTCTTTTTT TCCCCAAAT TATTCTTCGC CTGATTTTCC TCGCGGAGCG CTGCGCTCCC
 GACACCCCGC CCCGCCTCCC CTCTCCTCT CCCCCCGCCC GCGGGCCCCC CAAAGTCCCG GCCGGGCCGA
 GGGTCGGCGG CCGCCGGCGG GCCGGGCCCG CGCACAGCGC CCGCACTAGC ATGGAGAGCG ACGAGAGCGG
 CCTGCCCGCC ATGGAGATCG AGTGCCGCAT CACCGGCACC CTGAACGGCG TGGAGTTCGA GCTGGTGGGC
 GCGGAGAGAG GCACCCCGCA GCAGGGCCGC ATGACCAACA AGATGAAGAG CACCAAAGGC GCCCTGACCT
 TCAGCCCTA CTGCTGAGC CACGTGATGG GCTACGGCTT CTACCACTTC GGCACCTACC CCAGCGGCTA
 CGAGAACCCC TTCCTGCACG CCATCAACAA CGGCGGCTAC ACCAACACCC GCATCGAGAA GTACGAGGAC
 GCGGCGTGC TGCACGTGAG CTTCAGCTAC CGCTACGAGG CCGGCCCGCT GATCGGCGAC TTCAAGGTGA
 TGGGACCCGG CTTCCCGGAG GACAGCGTGA TCTTCACCGA CAAGATCATC CGCAGCAACG CCACCGTGGG
 GCACCTGCAC CCCATGGGCG ATAACGATCT GGATGGCAGC TTCACCCGCA CCTTCAGCCT GCGCGACGGC
 GGCTACTACA GCTCCGTGGT GGACAGCCAC ATGCACTTCA AGAGCGCCAT CCACCCAGC ATCCTGCAGA
 ACGGGGGCCC CATGTTCCGC TTCGCGCGG TGGAGGAGGA TCACAGCAAC ACCGAGCTGG GCATCGTGGA
 GTACCAGCAC GCCTTCAAGA CCCCGGATGC AGATGCCGTT GAAGAAAGAG TTTAAGAATT CCGATCATAT
 TCAATAACCC TTAATATAAC TTCGTATAAT GTATGCTATA CGAAGTTATT AGGTCTGAAG AGGAGTTTAC
 GTCCAGCAA GCTTAGGATC TCGACCTCGA AATTCTACCG GGTAGGGGAG GCGCTTTTCC CAAGGCAGTC
 TGGAGCATGC GCTTTAGCAG CCCCGCTGGG CACTTGGCGC TACACAAGTG GCCTCTGGCC TCGCACACAT
 TCCACATCCA CCGGTAGGCG CCAACCGACT CCGTTCTTTG GTGGCCCTT CGCGCCACT TCTACTCTC
 CCCTAGTCAG GAAGTTCCCG CCCGCCCGC AGCTCGGTC GTGCAGGACG TGACAAATGG AAGTAGCACG
 TCTCACTAGT CTCGTGCAGA TGGACAGCAC CGCTGAGCAA TGGAAAGCGG TAGGCCTTTG GGGCAGCGGC
 CAATAGCAGC TTTGCTCCTT CGCTTTCTGG GCTCAGAGG TGGGAAGGGG TGGTCCGGG GCGGGCTCA
 GGGGCGGGCT CAGGGGCGGG GCGGGCGCCC GAAGTCTC CGGAGGCCCG GCATTCTGCA CGCTTCAAAA
 GCGCAGTCT GCCGCGTGT TCTCCTTTC CTCATCTCCG GGCTTTTGA CCTGCATCCA TCTAGATCTC
 GAGCAGTGA AGCTTACCAT GACCGAGTAC AAGCCCACGG TCGCCTCGC CACCCGCGAC GACGTCCCA
 GGGCCGTACG CACCCTCGCC GCCGCTTCC CCGACTACC CGCCACGCGC CACACCGTCG ATCCGGACCG
 CCACATCGAG CGGGTCACCG AGCTGCAAGA ACTCTTCTC ACGCGCGTCG GGCTCGACAT CGGCAAGGTG
 TGGGTCGCGG ACGACGGCGC CCGGTGGCG GTCTGGACCA CGCCGGAGAG CGTCGAAGCG GGGGCGGTGT
 TCGCCGAGAT CGGCCCGCGC ATGGCCGAGT TGAGCGGTTT CCGGCTGGCC GCGCAGCAAC AGATGGAAGG
 CCTCTGGCG CCGCACCAGC CCAAGGAGCC CGCGTGGTTC CTGGCCACC GCGGCTCTC GCCCGACCAC
 CAGGGCAAGG GTCTGGGCGG CCGCGTGTG CTCCCGGAG TGGAGGCGGC CGAGCGCGCC GGGGTGCCCG
 CCTTCTGGA GACCTCCGCG CCCACAACC TCCCCTTCTA CGAGCGGCTC GGCTTACC GTCACCCCGA
 CGTCGAGGTG CCCGAAGGAC CGCGCACCTG GTGCATGACC CGCAAGCCCG GTGCCTGACG CCCGCCAC
 GACCCGACG GCCCGACCGA AAGGAGCGCA CGACCCATG CATCGATGAT ATCAGATCCC CCGGATGCAG
 AAATTGATGA TCTATTAAC AATAAAGATG TCCACTAAA TGGAAATTTT TCCTGCATA CTTTGTAAAG
 AAGGGTGAGA ACAGAGTACC TACATTTTGA ATGGAAGGAT TGGAGTACG GGGGTGGGG TGGGTGGGA
 TTAGATAAAT GCCTGCTCTT TACTGAAGGC TCTTACTAT TGCTTTATGA TAATGTTTCA TAGTTGATA
 TCATAATTTA AACAAGCAA ACCAAATTAA GGGCCAGCTC ATTCCTCCA CTCATGATCT ATAGATCTAT
 AGATCTCTCG TGGATCATT GTTTTTCTCT TGATTCCAC TTTGTGGTTC TAAGTACTGT GGTTCACAA
 TGTGTCAGTT TCATAGCCTG AAGAACGAGA TCAGCAGCCT CTGTTCCACA TACACTTCAT TCTCAGTATT
 GTTTTGCAA GTTCTAATC CATCAGAAGC TGGTCGAGAT CCGGAACCCT TAATATAACT TCGTATAATG
 TATGCTATAC GAAGTTATTA GGTCCCTCGA AGAGTTTAC TAGGCGCGCC TCGGAGATCA GCAAGCGCCT
 GGGCGCCGAG TGGAACTTT TGTCGGAGAC GGAGAAGCGG CCGTTCATCG ACGAGGCTAA GCGGCTGCGA
 GCCTGCACA TGAAGGAGCA CCCGATTAT AAATACCGGC CCCGGCGGAA AACCAAGACG CTCATGAAGA
 AGGATAAGTA CACGCTGCC GCGGGGCTGC TGGCCCCGG CCGCAATAGC ATGGCGAGCG GGGTCGGGGT
 GGGCGCCGGC CTGGGCGCGG GCGTGAACCA GCGCATGGAC AGTTACGCGC ACATGAACGG CTGGAGCAAC
 GGCAGCTACA GCATGATGCA GGACAGCTG GGCTACCCGC AGCACCAGGG CCTCAATGCG CACGGCGCAG
 CGCAGATGCA GCCCATGCAC CGCTACGACG TGAGCGCCCT GCAGTACAAC TCCATGACCA GCTCGCAGC

```

CTACATGAAC GGCTCGCCCA CCTACAGCAT GTCCTACTCG CAGCAGGGCA CCCCTGGCAT GGCTCTTGGC
TCCATGGGTT CGGTGGTCAA GTCCGAGGCC AGCTCCAGCC CCCCTGTGGT TACCTCTTCC TCCCACTCCA
GGGCGCCCTG CCAGGCCGGG TCCACAGTCT TCACTGACTG ACTGACTGGA AAGTCCTCTC CACTGACTGT
AGCCTCCAAT TCACTGGCCG TCGTTTTACA ACGTCGTGAC TGGGAAAACC CTGGCGTTAC CCAACTTAAT
CGCCTTGACAG CACATCCCCC TTTCGCCAGC TGGCGTAATA GCGAAGAGGC CCGCACCGAT CGCCCTTCCC
AACAGTTGCG CAGCCTGAAT GCGGAATGGC GCCTGATGCG GTATTTTCTC CTTACGCATC TGTGCGGTAT
TTCACACCGC ATACGTCAA GCAACCATAG TACGCGCCCT GTAGCGGCGC ATTAAGCGCG GCGGGTGTGG
TGTTTACGCG CAGCGTGACC GCTACACTTG CCAGCGCCCT AGCGCCCGCT CCTTTCGCTT TCTTCCCTTC
CTTTCTCGCC ACGTTCGCGG GCTTTCGCCG TCAAGCTCTA AATCGGGGGC TCCCTTTAGG GTTCCGATTT
AGTGCTTTAC GGCACCTCGA CCCCAAAAAA CTTGATTTGG GTGATGGTTC ACGTAGTGGG CCATCGCCCT
GATAGACGGT TTTTCGCCCT TTGACGTTGG AGTCCACGTT CTTTAATAGT GGACTCTTGT TCCAACTGG
AACAACTCT AACCTATCT CGGGCTATTC TTTTGATTTA TAAGGGATTT TGCCGATTTT GGCCTATTGG
TTAAAAATG AGCTGATTTA ACAAAAAATTT AACGCGAATT TTAACAAAAT ATTAACGTTT ACAATTTTAT
GGTGCCTCT CAGTACAATC TGCTCTGATG CCGCATAGTT AAGCCAGCCC CGACACCCGC CAACACCCGC
TGACGCGCCC TGACGGGCTT GTCTGCTCCC GGCATCCGCT TACAGACAAG CTGTGACCGT CAACGGGAGC
TGCATGTGTC AGAGGTTTTT ACCGTCATCA CCGAAACGCG CGACCCGAAA GGGCCTCGTG ATACGCCTAT
TTTTATAGGT TAATGTCATG ATAATAATGG TTTCTTAGAC GTCAGGTGGC ACTTTTCGGG GAAATGTGCG
CGGAACCCCT ATTTGTTTAT TTTTCTAAT ACATTCAAAT ATGTATCCGC TCATGAGACA ATAACCCTGA
TAAATGCTTC AATAATATTG AAAAAGGAAG AGTATGAGTA TTCAACATTT CCGTGTGCGC CTTATTCCCT
TTTTTGCGGC ATTTTGCCTT CCTGTTTTTG CTCACCCAGA AACGCTGGTG AAAGTAAAG ATGCTGAAGA
TCAGTTGGGT GCACGAGTGG GTTACATCGA ACTGGATCTC AACAGCGGTA AGATCCTTGA GAGTTTTTCGC
CCGAAGAAC GTTTTCCAAT GATGAGCACT TTTAAAGTTC TGCTATGTGG CGCGGTATTA TCCCGTATTG
ACGCCGGGCA AGAGCAACTC GGTCGCCGCA TACACTATTC TCAGAAATGAC TTGGTTGAGT ACTCACCAGT
CACAGAAAAG CATCTTACGG ATGGCATGAC AGTAAGAGAA TTATGCAGTG CTGCCATAAC CATGAGTGAT
AACACTGCGG CCAACTTACT TCTGACAACG ATCGGAGGAC CGAAGGAGCT AACCGCTTTT TTGCACAACA
TGGGGGATCA TGTAACCTCGC CTT

```

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_003106](#)

UniProt ID:

[P48431](#)

Synonyms:

ANOP3; MCOPS3

Summary:

This intronless gene encodes a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. The product of this gene is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. This gene lies within an intron of another gene called SOX2 overlapping transcript (SOX2OT). [provided by RefSeq, Jul 2008]

Product images:

