

Product datasheet for **KN210928**

NRP2 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:	NRP2
Locus ID:	8828
Components:	<p>KN210928G1, NRP2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTAAGAAAACCCAGGTGAG</p> <p>KN210928G2, NRP2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CACCAAGTGAGAGGCCAACC</p> <p>KN210928D, 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**

```

AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTG TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTTGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTCAACCAG GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCGGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAAGCGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCCAAATC AAGTTTTTTG
GGGTCGAGGT GCCGTAAAGC ACTAAATCGG AACCCATAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACAG CTGCGCGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATCGCT AAGGAGAAAA TACCGCATCA GGCGCCATTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGCTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GCGTCTCAAC

```



[View online »](#)

CTGACTCCCC TCGAGAGGCT GGCCAAGCGG GTGTAGCCGT TGGGGGAGGC TCCC GCCCGG GGAACCCGGC
 GAGGACAAGA GCAGGGCGGC CGCCTTCCAC TCGGGCTGTC CGGCGGCGGC TGCCTCCGCC CGTGTGTCCG
 TCAAGGTGTC CGCGGGATGT GTGTCACTTT ACGCCTCTGA GATCACACAG CTGCCTGGGG GCCGTGTGAT
 GCCCAAGGCA AGTCTTGGTT TTAATTATTA TTATTATCAT TATTGTTACG CTTGGCTTTT GGGAAATACT
 CGTGATATTT GTAGGATAAA GGAATGACA CTTTGAGGAA CTGGAGAGAA CATATATGCG TTTTGTTTTT
 AAGAGGAAAA CCGTGTCTC TTCCCGGCTT GTTCCCTCTT TGCTGATTTT AGGAGCTACT CTCCTCCTGG
 TGAGGTGAA ATTCCAGCAA GAATAGAGGT GAAGACAAGC CACCAGGACT CAGGAGGAA ATCGTGACCA
 TTAGAAAACCT CTGCATAAGA CGTTGTAAGG AGGAAAATAA AAGAGAGAAA AACACAAAAGA TTTAAACAAG
 AAACCTACGA ACCCAGCTCT GAAAAGAGCC ACCTTCTCCA AAAGTAGCAT GGAGAGCGAC GAGAGCGGCC
 TGCCCGCCAT GGAGATCGAG TGCCGCATCA CCGGCACCCT GAACGGCGTG GAGTTCGAGC TGGTGGGCGG
 CGGAGAGGGC ACCCCGAGC AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC
 AGCCCTACC TGCTGAGCCA CGTGATGGGC TACGGCTTCT ACCACTTCGG CACCTACCCC AGCGGTACG
 AGAACCCCTT CCTGCACGCC ATCAACAACG GCGGCTACAC CAACACCCGC ATCGAGAAGT ACGAGGACGG
 CGGCGTGCTG CACGTGAGCT TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG
 GGCACCGGCT TCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC
 ACCTGCACCC CATGGGCGAT AACGATCTGG ATGGCAGCTT CACCCGACC TTCAGCCTGC GCGACGCGG
 CTACTACAGC TCCGTGGTGG ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC
 GGGGGCCCA TGTTCCGCTT CCGCCGCGTG GAGGAGGATC ACAGCAACAC CGAGCTGGGC ATCGTGGAGT
 ACCAGCACGC CTTCAAGACC CCGGATGCAG ATGCCGGTGA AGAAAGAGTT TAAGAATTCC GATCATATTC
 AATAACCTT AATATAACTT CGTATAATGT ATGCTATACG AAGTTATTAG GTCTGAAGAG GAGTTTACGT
 CCAGCCAAGC TTAGGATCTC GACCTCGAAA TTCTACCGGG TAGGGGAGGC GCTTTTCCCA AGGCAGTCTG
 GAGCATGCGC TTTAGCAGCC CCGCTGGGCA CTTGGCGCTA CACAAGTGGC CTCTGGCCTC GCACACATTC
 CACATCCACC GGTAGGCGCC AACCGACTCC GTTCTTTGGT GGCCCTTCG GCCACCTTC TACTCTCCC
 CTAGTCAGGA AGTTCCCCCG CGCCCGCAG CTCGCGTCTG GCAGGACGTG CCAAATGGAA GTAGCACGTC
 TCACTAGTCT CGTGCAGATG GACAGCACCG CTGAGCAATG GAAGCGGGTA GGCCCTTGGG GCAGCGGCCA
 ATAGCAGCTT TGCTCCTTCG CTTTCTGGGC TCAGAGGCTG GGAAGGGGTG GGTCCGGGGG CGGGCTCAGG
 GGCGGGCTCA GGGGCGGGG GGGCGCCCGA AGGTCTCCG GAGGCCCGGC ATTCTGCACG CTTCAAAAGC
 GCACGTCTGC CGCGCTGTTT TCCTCTTCTT CATCTCCGGG CCTTTCGACC TGCATCCATC TAGATCTCGA
 GCAGCTGAAG CTTACCATGA CCGAGTACAA GCCACGGTG CGCCTCGCCA CCCGCGACGA CGTCCCAGG
 GCCGTACGCA CCCTCGCCG CGCGTTCCGC GACTACCCG CCACGCGCCA CACCGTCGAT CCGGACCGCC
 ACATCGAGCG GGTACCCGAG CTGCAAGAAC TTTCTTCCAC GCGCGTGGG CTCGACATCG GCAAGGTGTG
 GGTGCGGAC GACGGCGCCG CGGTGGCGGT CTGGACCACG CCGGAGAGCG TCGAAGCGGG GCGCGTGTTC
 GCCGAGATCG GCCCGCGCAT GGCCGAGTTG AGCGGTTCCG GGCTGGCCG GCAGCAACAG ATGGAAGGCC
 TCCTGGCGCC GCACCGGCC AAGGAGCCCG CGTGGTTCTT GGCCACCGTC GGCGTCTCGC CCGACCACCA
 GGGCAAGGGT CTGGGACGCG CCGTCGTGCT CCCCAGGAGT GAGGCGGCGG AGCGCGCCGG GGTGCCCGCC
 TTCTGGAGA CCTCCGCGCC CCACAACCTC CCCTTCTACG AGCGGCTCGG CTTACCGTC ACCGCCGACG
 TCGAGGTGCC CGAAGGACCG CGCACCTGGT GCATGACCCG CAAGCCCGGT GCCTGACGCC CGCCCCACGA
 CCCGACGCGC CCGACCGAAA GGAGCGCACG ACCCATGCA TCGATGATAT CAGATCCCCG GGATGCAGAA
 ATTGATGATC TATTAACAA TAAAGATGTC CACTAAAATG GAAGTTTTTC CTGTCATACT TTGTTAAGAA
 GGGTGAGAAC AGAGTACCTA CATTTTGAAT GGAAGGATTG GAGCTACGGG GGTGGGGGTG GGGTGGGATT
 AGATAAATGC CTGCTCTTTA CTGAAGGCTC TTTACTATTG CTTTATGATA ATGTTTCATA GTTGATATC
 ATAATTTAAA CAAGCAAAAC CAAATTAAGG GCCAGCTCAT TCCTCCCACT CATGATCTAT AGATCTATAG
 ATCTCTCGTG GGATCATTGT TTTTCTTTG ATTCCCACTT TGTGGTTCTA AGTACTGTGG TTTCCAAATG
 TGTCAGTTTC ATAGCCTGAA GAACGAGATC AGCAGCCTCT GTTCCACATA CACTTCATTC TCAGTATTGT
 TTTGCCAAGT TCTAATTCCA TCAGAAGCTG GTCGAGATCC GGAACCCTTA ATATAACTTC GTATAATGTA
 TGCTATACGA AGTTATTAGG TCCCTCGAAG AGTTCACTA GGCGCGCCGT GACCGCTAAA GCAGGAAGGC
 CACGCAGAAC GGCACAGAAG AAGGCTCCCT CAGTACTCAA TAATTTAAAG AGAGATCCCA GCCGGCCCTT
 CCTACACCAC CACGGCTGCT AAAACCCAAC TTTCTCTCC TGCTAGGAGT GTGTGTGTGT GTGTGTGTGT
 GTGTGTGTGA GTGTGTTTTG AAACAGAATT TGGCGGTGTT CATATGTCAC ATATGGACTG AATCAAAGGT
 TTAATAATAC TACAAAGCCT TTGCATTACA GTTTTTGGGA ATTTTTTTTC CCTGTCTTGA AGCAGAACAC
 ATCTCCCTTG AGTTTCTCCA ACTAGCCAGT GAAATATAAA TCATTTGCAT TCCCTCCACT TAGCTACATT
 GAGCAATGTT AACTGAAGG CTTGGGAAAG ACAAGAGTTT AGTTTTGGTT TTCAGATGCT GTAGATTCTT

TGGAGAATGA CTGGTTATGC TTCAGAATCA TAAGGCTCAG GCTGGTGGAG CAAGTTGGCT TGTGGCTGAG
 ATAGGGGCTT GGGGTTGGGT GCTGCTGGCA ACCAAGACGG TTGGTCTCTT CTCTCTTCAT CCATGTGTTG
 TCTGGGAAAG TAAATCGTAC GAAGAGACGA CTGACTGACT GACTGGAAAG AGGAAGGGCT GGAAGAGGAA
 GGAGCTTGGC GTAATCATGG TCATAGCTGT TTCCTGTGTG AAATTGTTAT CCGCTCACAA TTCCACACAA
 CATACGAGCC GGAAGCATAA AGTGATAAGC CTGGGGTGCC TAATGAGTGA GCTAACTCAC ATTAATTGGC
 TTGCGCTCAC TGCCCGCTTT CCAGTCGGGA AACCTGTCTG GCCAGCTGCA TTAATGAATC GGCCAACGG
 CGGGGAGAGG CGGTTTGGGT ATTGGGCGCT CTTCCGCTTC CTCGCTCACT GACTCGCTGC GCTCGTCTG
 TCGGCTGCGG CGAGCGGTAT CAGCTCACTC AAAGGCGGTA ATACGGTTAT CCACAGAATC AGGGGATAAC
 GCAGGAAAGA ACATGTGAGC AAAAGGCCAG CAAAAGGCCA GGAACCGTAA AAAGGCCGCG TTGCTGGCGT
 TTTTCCATAG GCTCCGCCCC CCTGACGAGC ATCACAACAAA TCGACGCTCA AGTCAGAGGT GGCGAAACCC
 GACAGGACTA TAAAGATACC AGGCGTTTCC CCCTGGAAGC TCCCTCGTGC GCTCTCCTGT TCCGACCCTG
 CCGCTTACCG GATACCTGTC CGCCTTTCTC CTTTCGGGAA GCGTGGCGCT TTCTCATAGC TCACGCTGTA
 GGTATCTCAG TTCGGTGTAG GTCGTTCCGCT CCAAGCTGGG CTGTGTGCAC GAACCCCGG TTCAGCCCGA
 CCGCTGCGCC TTATCCGGTA ACTATCGTCT TGAGTCCAAC CCGTAAGAC ACGACTTATC GCCACTGGCA
 GCAGCCACTG GTAACAGGAT TAGCAGAGCG AGGTATGTAG GCGGTGCTAC AGAGTCTTGT AAGTGGTGGC
 CTAACACTAGG CTACACTAGA AGAACAGTAT TTGGTATCTG CGCTCTGCTG AAGCCAGTTA CCTTCGAAAA
 AAGAGTTGGT AGCTCTTGAT CCGGCAAACA AACCACCCTG GGTAGCCGTG GTTTTTTTGT TTGCAAGCAG
 CAGATTACGC GCAGAAAAAA AGGATCTCAA GAAGATCCTT TGATCTTTTC TACGGGGTCT GACGCTCAGT
 GGAACGAAAA CTCACGTAA GGGATTTTGG TCATGAGATT ATCAAAAAGG ATCTTCACCT AGATCCTTTT
 AAATTAATAA TGAAGTTTTA AATCAATCTA AAGTATATAT GAGTAAACTT GGTCTGACAG TTACCAATGC
 TTAATCAGTG AGGCACCTAT CTCAGCGATC TGTCTATTTT GTTCATCCAT AGTTGCCTGA CTCCCCGTCG
 TGTAGATAAC TACGATACGG GAGGGCTTAC CATCTGGCCC CAGTGTGCA ATGATACCGC GAGAACCACG
 CTCACCGGCT CCAGATTTAT CAGCAATAAA CCAGCCAGCC GGAAGGGCCG AGCGCAGAAG TGGTCCTGCA
 ACTTTATCCG CCTCCATCCA GTCTATTAAT TGTTGCCGGG AAGCTAGAGT AAGTAGTTCG CCAGTTAATA
 GTTTGCGCAA CGTTGTTGCC ATTGCTACAG GCATCGTGGT GTCACGCTCG TCGTTTGTA 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_003872](#), [NM_018534](#), [NM_201264](#), [NM_201266](#), [NM_201267](#), [NM_201279](#)

UniProt ID:

[O60462](#)

Synonyms:

NP2; NPN2; PRO2714; VEGF165R2

Summary:

This gene encodes a member of the neuropilin family of receptor proteins. The encoded transmembrane protein binds to SEMA3C protein {sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C} and SEMA3F protein {sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F}, and interacts with vascular endothelial growth factor (VEGF). This protein may play a role in cardiovascular development, axon guidance, and tumorigenesis. Multiple transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

Product images:

