

Product datasheet for **KN217134**

beta 1 Adrenergic Receptor (ADRB1) 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:	beta 1 Adrenergic Receptor
Locus ID:	153
Components:	<p>KN217134G1, beta 1 Adrenergic Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGACGACAGGTTACCGGGCT</p> <p>KN217134G2, beta 1 Adrenergic Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCGCGGTGGCCGCGCCGTCTG</p> <p>KN217134D, 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 CAAGTCATTC TGAGAATAGT GTATGCGGCG
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCGT GTTGAGATCC AGTTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAACA AATAGGGGTT CCGCGCAT TCCCCGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCG TTGACGGTCA CAGCTTGCT GTAAGCGGAT 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 CACCCAATC 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 TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGAAGACACA

```



View online »

CCTAGGGGAC GGGGCCCGG GGGGAGCCAG GCGCGGAAGG GGGCGCGGGG GAACAGGGAC CAGGAACCAG
 CGGGCGCAGG AAGGGGTGCG TCCGCAGGAA CCCGCGGGCG CACGGGAGGC ACTAGCTACG CGATCAGCTC
 GGGACTCTCA GGAGCCGCTC AATTGCCAAC GGGAGGGGGG TGGAGGTGGG TGGAGGTGGG GGTGCAGACC
 AGACGGGGGC GTGCCTTTGC CCGGATTGGC TGCAGGAGCC TGACGCGAGG CCCCAGGGGT TGGCTTGGGG
 AGTGGGAGCG GGTGGGGTGG GGTGCTGGGT GCCGGAGCTG CGGGCCCGGC GCGCTCAGAA ACATGCTGAA
 GTCCCGCGCG CTCTTCCAGC AGCGGCAGCG GCTCCAGCAG CAGCGGGCGC GGGCGCGCGC CCGGCAGCGG
 CAGCGACAGC GCTCGGCTCC TCGGGAAAG GCGCCCGCGC CCCATGCCTC CGGCCCGCGC CCGCGGCTGC
 CCTGACCCGG CCGGCACCTC CCTCTGCGCA CCACGCCGCC CGGGCTTCTG GGGTGTTCCT CAACCACGGC
 CCAGCCCTGC CACACCCCCC GCCCCCGGCC TCCGCAGCTC GGCCTAGCA TGGAGAGCGA CGAGAGCGGC
 CTGCCCGCCA TGGAGATCGA GTGCCGCATC ACCGGCACCC TGAACGGCGT GGAGTTCGAG CTGGTGGGCG
 GCGGAGAGGG CACCCCGAG CAGGGCCGCA TGACCAACAA GATGAAGAGC ACCAAAGGCG CCCTGACCTT
 CAGCCCCTAC CTGCTGAGCC ACGTGATGGG CTACGGCTTC TACCACTTCG GCACCTACCC CAGCGGCTAC
 GAGAACCCCT TCCTGCACGC CATCAACAAC GGGCGCTACA CCAACACCCG CATCGAGAAG TACGAGGACG
 GCGGCGTGCT GCACGTGAGC TTCAGCTACC GCTACGAGGC CGGCCGCGTG ATCGGCGACT TCAAGGTGAT
 GGGCACCGGC TTCCCGAGG ACAGCGTGAT CTTACCAGC AAGATCATCC GCAGCAACGC CACCGTGGAG
 CACCTGCACC CCATGGGCGA TAACGATCTG GATGGCAGCT TCACCCGCAC CTTACAGCTG CGCGACGGCG
 GCTACTACAG CTCCGTGGTG GACAGCCACA TGCACTTCAA GAGCGCCATC CACCCAGCA TCCTGCAGAA
 CGGGGGCCCC ATGTTCCGCT TCCGCCGCGT GGAGGAGGAT CACAGCAACA CCGAGCTGGG CATCGTGGAG
 TACCAGCAGC CCTTCAAGAC CCCGGATGCA GATGCCGGTG AAGAAAGAGT TTAAGAATTC CGATCATATT
 CAATAACCCT TAATATAACT TCGTATAATG TATGCTATAC GAAGTTATTA GGTCTGAAGA GGAGTTTACG
 TCCAGCCAAG CTTAGGATCT CGACCTCGAA ATTCTACCGG GTAGGGGAGG CGCTTTTCCC AAGGCAGTCT
 GGAGCATCGC CTTTAGCAGC CCCGTGGGC ACTTGGCGCT ACACAAGTGG CCTCTGGCCT CGCACACATT
 CCACATCCAC CGGTAGGCGC CAACGACTC CGTTCTTTGG TGGCCCTTC GGCACACTT CTACTCTCC
 CCTAGTCAGG AAGTTCCTCC CCGCCCGCA GCTCGCGTCG TGCAGGACGT GACAAAATGGA AGTAGCACGT
 CTCACTAGTC TCGTGCAGAT GGACAGCACC GCTGAGCAAT GGAAGCGGGT AGGCCTTTGG GGCAGCGGCC
 AATAGCAGCT TTGCTCCTTC GCTTTCTGGG CTCAGAGGCT GGAAGGGGT GGGTCCGGGG GCGGGCTCAG
 GGGCGGGCTC AGGGGCGGGG CGGGCGCCCG AAGGTCTCC GGAGGCCCGG CATTCTGCAC GCTTCAAAAG
 CGCACGTCTG CCGCGCTGTT CTCCTCTTCC TCATCTCCGG GCCTTTTCGAC CTGCATCCAT CTAGATCTCG
 AGCAGCTGAA GCTTACCATG ACCGAGTACA AGCCACGGT GCGCCTCGCC ACCCGCAGC ACGTCCCAG
 GGGCGTACG ACCCTCGCG CCGCGTTCG CACTACCCG GCCACGCGCC ACACCGTGA TCCGGACCGC
 CACATCGAGC GGGTCACCGA GCTGCAAGAA CTCTTCTCA CGCGCGTCGG GCTCGACATC GGCAAGGTGT
 GGGTCCGGGA CGACGGCGCC GCGGTGGCGG TCTGACCAC GCCGGAGAGC GTCGAAGCGG GGGCGGTGTT
 CGCCGAGATC GGCCCGCGCA TGGCCGAGTT GAGCGGTTCC CGGCTGGCCG CGCAGCAACA GATGGAAGGC
 CTCTGGCGC CGCACCGGCC CAAGGAGCCC GCGTGTTTCC TGGCCACCGT CGGCGTCTCG CCCGACCACC
 AGGGCAAGGG TCTGGGCAGC GCCGTCGTGC TCCCGGAGT GGAGGCCGCC GAGCGCGCCG GGGTCCCCGC
 CTTCTGGAG ACCTCCGCGC CCCACAACCT CCCCTTCTAC GAGCGGCTCG GCTTACCGT CACCGCCGAC
 GTCGAGGTGC CCGAAGGACC GCGCACCTGG TGCATGACCC GCAAGCCCGG TGCCTGACGC CCGCCCCAG
 ACCCGCAGCG CCCGACCGAA AGGAGCGCAC GACCCCATGC ATCGATGATA TCAGATCCCC GGGATGCAGA
 AATTGATGAT CTATTAACA ATAAAGATGT CCACTAAAAT GGAAGTTTTT CCTGTACATC TTTGTTAAGA
 AGGGTGAGAA CAGAGTACCT ACATTTTGAA TGAAGGATT GGAGCTACGG GGGTGGGGT GGGGTGGGAT
 TAGATAAATG CCTGCTCTTT ACTGAAGGCT CTTTACTATT GCTTTATGAT AATGTTTCAT AGTTGGATAT
 CATAATTTAA ACAAGCAAAA CCAAATTAAG GGCCAGCTCA TTCCTCCAC TCATGATCTA TAGATCTATA
 GATCTCTCGT GGGATCATTG TTTTCTCTT GATTCCCACT TTGTGTTTCT AAGTACTGTG GTTTCCAAAT
 GTGTCAAGTT CATAGCCTGA AGAACGAGAT CAGCAGCTC TGTTCCACAT ACACTTCATT CTCAGTATTG
 TTTTGCCAAG TTCTAATTCC ATCAGAAGCT GGTGAGATC CGGAACCCTT AATATAACTT CGTATAATGT
 ATGCTATACG AAGTTATTAG GTCCTCGAA GAGGTTCACT AGGCGCGTTG CTGGTGGCCG CGTCCCGCC
 CGCCTCGTTG CTGCCTCCCG CCAGCGAAAG CCCCAGCCG CTGTCTCAGC AGTGGACAGC GGGCATGGGT
 CTGCTGATGG CGCTCATCGT GCTGCTCATC GTGGCGGGCA ATGTGCTGGT GATCGTGGCC ATCGCCAAGA
 CGCCGCGGCT GCAGACGCTC ACCAACCTCT TCATCATGTC CCTGGCCAGC GCCGACCTGG TCATGGGGCT
 GCTGGTGGTG CCGTTCGGGG CCACCATCGT GGTGTGGGGC CGCTGGGAGT ACGGCTCCTT CTTCTGCGAG
 CTGTGGACCT CAGTGGACGT GCTGTGCGTG ACGGCCAGCA TCGAGACCCT GTGTGTCATT GCCCTGGACC
 GCTACCTCGC CATCACCTCG CCCTTCCGCT ACCAGAGCCT GCTGACGCGC GCGCGGGCGC GGGGCTCGT

```

GTGCACCGTG TGGGCCATCT CGGCCCTGGT GTCCTTCCTG CCCATCCTCA TGCACCTGGT GCGGGCGGAG
AGCGACGAGG CGCGCCGCTG CTACAACGAC CCAAGTGTCT GCGACTTCGT CACCAACCGG GCCTACGCCA
TCGCCTCGTC CGTAGTCTAC GACAGTCTTC ACTGACTGAC TGACTGGAAA GAGGAAGGGC TGGAAGAGGA
AGGAGCTTGG CGTAATCATG GTCATAGCTG TTTCTGTGT GAAATTGTTA TCCGCTCACA ATTCCACACA
ACATACGAGC CGGAAGCATA AAGTGTAAG CCTGGGGTGC CTAATGAGTG AGCTAACTCA CATTAAATTGC
GTTGCGCTCA CTGCCCGCTT TCCAGTCGGG AAACCTGTCT TGCCAGCTGC ATTAATGAAT CGGCCAACGC
GCGGGGAGAG GCGGTTTGGC TATTGGGCGC TCTTCCGCTT CCTCGCTCAC TGACTCGCTG CGCTCGGTCTG
TTCGGCTCGC GCGAGCGGTA TCAGCTCACT CAAAGGCGGT AATACGGTTA TCCACAGAAT CAGGGGATAA
CGCAGGAAAG AACATGTGAG CAAAAGGCCA GCAAAAGGCC AGGAACCGTA AAAAGGCCGC GTTGCTGGCG
TTTTTCCATA GGCTCCGCC CCCTGACGAG CATCACAAAA ATCGACGCTC AAGTCAGAGG TGGCGAAACC
CGACAGGACT ATAAAGATAC CAGGCGTTTC CCCCTGGAAG CTCCCTCGTG CGCTCTCCTG TTCCGACCCT
GCCGCTTACC GGATACCTGT CCGCCTTTCT CCCTTCGGGA AGCGTGGCGC TTTCTCATAG CTCACGCTGT
AGGTATCTCA GTTCGGTGTA GGTTCGTTTC TCCAAGCTGG GCTGTGTGCA CGAACCCCCG GTTCAGCCCG
ACCGCTGCGC CTTATCCGGT AACTATCGTC TTGAGTCAA CCCGGTAAGA CAGGACTTAT CGCCACTGGC
AGCAGCCACT GGTAACAGGA TTAGCAGAGC GAGGTATGTA GCGGGTGCTA CAGAGTTCTT GAAGTGGTGG
CCTAACTACG GCTACACTAG AAGAACAGTA TTTGGTATCT GCGCTCTGCT GAAGCCAGT ACCTTCGGAA
AAAGAGTTGG TAGCTCTTGA TCCGGCAAAC AAACCACCGC TGGTAGCGGT GGTTTTTTTG TTTGCAAGCA
GCAGATTACG CGCAGAAAAA AAGGATCTCA AGAAGATCCT TTGATCTTTT CTACGGGGTC TGACGCTCAG
TGGAACGAAA ACTCACGTTA AGGGATTTTG GTCATGAGAT TATCAAAAAG GATCTTCACC TAGATCCTTT
TAAATTAATA ATGAAGTTTT AAATCAATCT AAAGTATATA TGAGTAAACT TGGTCTGACA GTTACCAATG
CTTAATCAGT GAGGCACCTA TCTCAGCGAT CTGTCTATTT CGTTCATCCA TAGTTGCCTG ACTCCCGTC
GTGTAGATAA CTACGATACG GGAGGGCTTA CCATCTGGCC CCAGTGCTGC AATGATACCG CGAGAACCAC
GCTCACCGGC TCCAGATTTA TCAGCAATA ACCAGCCAGC CGGAAGGGCC GAGCGCAGAA GTGGTCTGTC
AACTTTATCC GCCTCCATCC AGTCTATTAA TTGTTGCCGG GAAGCTAGAG TAAGTAGTTC GCCAGTTAAT
AGTTTGCGCA ACGTTGTTGC CATTGCTACA GGCATCGTGG TGTCACGCTC GTCGTTTGGT ATGGCTTCAT
TCAGCTCCGG TTCCAACGA TC

```

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_000684](#)

UniProt ID:

[P08588](#)

Synonyms:

ADRB1R; B1AR; BETA1AR; RHR

Summary:

The adrenergic receptors (subtypes alpha 1, alpha 2, beta 1, and beta 2) are a prototypic family of guanine nucleotide binding regulatory protein-coupled receptors that mediate the physiological effects of the hormone epinephrine and the neurotransmitter norepinephrine. Beta-1 adrenoceptors are predominately located in the heart. Specific polymorphisms in this gene have been shown to affect the resting heart rate and can be involved in heart failure. [provided by RefSeq, Sep 2019]

Product images:

