

## Product datasheet for **KN207576**

### APJ Receptor (APLNR) 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:** APJ Receptor  
**Locus ID:** 187  
**Components:** **KN207576G1**, APJ Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CACAGACTGGAAATCCTCGG  
**KN207576G2**, APJ Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGTGATTTTGACAACTACTA  
**KN207576D**, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

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 GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
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 GCAGCTCCCG 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 CACCAAATC AAGTTTTTTG
GGTTCGAGGT GCCGTAAAGC ACTAAATCGG AACCCATAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACAG CTGCGGTAA 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 CGTTGTA AAA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAGG CTGTCGCCGT GCTCATTTGA
```



TAACTGCCG TTATTCATGC GACACAGATT GGATGGAAGG GGGTGAGAAC AGGAGGGCGG AGAGCACTGA  
 GGAGGGAGTG CCCTAAAGGG CAGGCAGGAA GTGGTGGCCA GAGGAAAGTG GAGGGATAGG GGCTGGGGTG  
 AAGGTGGGTG GCAGCCAGAA AGGAGAGGCG GGGCCAGGAA AGCCGACTTG CAAAACCACA GATAATGTTC  
 AGCCCAGCAC AGTAGGGGTC AATTTGGTCC ACTTGCTCAG TGACAAAAAG AAAAAAAG TGGGCTGTCA  
 CTAAGATTT TGA CTACAA GAGAGGGGCT GGTCTGGAGG TGGGAGGAGG GAGTGACGAG TCAAGGAGGA  
 GACAGGGACG CAGGAGGGTG CAAGGAAGTG TCTTAACTGA GACGGGGTA AGGCAAGAGA GGGTGGAGGA  
 AATTCTGCAG GAGACAGGCT TCCTCCAGGG TCTGGAGAAC CCAGAGGCAG CTCCTCCTGA GTGCTGGGAA  
 GGACTCTGGG CATCTTCAGC CCTTCTTACT CTCTGAGGCT CAAGCCAGAA ATTCAGGCTG CTTGCAGAGT  
 GGGTGACAGA GCCACGGAGC TGGTGTCCCT GGGACCTCTT GCCCGTCTTC TCTCCACTCC CCAGCACTAG  
 CATGGAGAGC GACGAGAGCG GCCTGCCCGC CATGGAGATC GAGTGCCGCA TCACCGGCAC CCTGAACGGC  
 GTGGAGTTCG AGCTGGTGGG CGGCGGAGAG GGCACCCCGC AGCAGGGCCG CATGACCAAC AAGATGAAGA  
 GCACCAAAGG CGCCCTGACC TTCAGCCCTT ACCTGCTGAG CCACGTGATG GGCTACGGCT TCTACCACTT  
 CGGCACCTAC CCCAGCGGCT ACGAGAACC CTTCCTGCAC GCCATCAACA ACGGCGGCTA CACCAACACC  
 CGCATCGAGA AGTACGAGGA CGGCGGCGTG CTGCACGTGA GCTTCAGCTA CCGCTACGAG GCCGGCCGCG  
 TGATCGGCGA CTTCAAGGTG ATGGGCACCG GCTTCCCGA GGACAGCGTG ATCTTACCAC ACAAGATCAT  
 CCGCAGCAAC GCCACCGTGG AGCACCTGCA CCCCATGGGC GATAACGATC TGGATGGCAG CTTACCCCGC  
 ACCTTCAGCC TGC GCGACGG CGGCTACTAC AGCTCCGTGG TGGACAGCCA CATGCACCTT AAGAGCGCCA  
 TCCACCCAG CATCCTGCAG AACGGGGGCC CCATGTTTCG CTTCGGCCG GTGGAGGAGG ATCACAGCAA  
 CACCGAGCTG GGCATCGTGG AGTACCAGCA CGCCTTCAAG ACCCGGATG CAGATGCCGG TGAAGAAAGA  
 GTTTAAGAAT TCCGATCATA TTCAATAACC CTTAATATAA CTTCTGTATA TGTATGTAT ACGAAGTTAT  
 TAGGTCTGAA GAGGAGTTTA CGTCCAGCCA AGCTTAGGAT CTCGACCTCG AAATTCTACC GGGTAGGGGA  
 GGCCTTTTC CCAAGGCAGT CTGGAGCATG CGCTTTAGCA GCCCGCTGG GCACCTTGGC CTACACAAGT  
 GGCTCTGGC CTCGCACACA TTCCACATCC ACCGATAGG GCCAACCGAC TCCGTTCTTT GTTGGCCCTT  
 TCGCGCCACC TTCTACTCCT CCCTAGTCA GGAAGTTCCC CCCC GCCCG CAGCTCCGCT CGTGCAGGAC  
 GTGACAAATG GAAGTAGCAC GTCTACTAG TCTCGTGAG ATGGACAGCA CCGCTGAGCA ATGGAAGCGG  
 GTAGGCCTTT GGGG CAGCGG CCAATAGCAG CTTTGTCTCT TCGCTTTCTG GGCTCAGAGG CTGGGAAGGG  
 GTGGGTCCGG GGGCGGGCTC AGGGGCGGGC TCAGGGGCGG GCGGGGCGCC CGAAGGTCTT CCGGAGGCC  
 GGCATTCTGC ACGCTTCAA AGCGCACGTC TGCCGCGCTG TTCTCCTCTT CCTCATCTCC GGGCCTTTCTG  
 ACCTGCATCC ATCTAGATCT CGAGCAGCTG AAGCTTACCA TGACCGAGTA CAAGCCACG GTGCGCCTCG  
 CCACCCGCGA CGAGTCCC AGGGCCGTAC GCACCCTCG CGCCGCTTC GCCGACTACC CCGCCACGCG  
 CCACACCGTC GATCCGGACC GCCACATCGA GCGGGTACC GAGCTGCAAG AACTCTTCT CACGCGGCTC  
 GGGCTCGACA TCGCAAGGT GTGGGTGCGG GACGACGGCG CCGCGGTGGC GGTCTGACC ACGCCGAGA  
 GCGTCAAGC GGGGCGGGTG TTCGCCGAGA TCGGCCCGC CATGGCCGAG TTGAGCGGTT CCCGGCTGGC  
 CGCGCAGCAA CAGATGGAAG GCCTCCTGGC GCCGACCGG CCAAGGAGC CCGCGTGGT CCTGGCCACC  
 GTCGGCGTCT CGCCGACCA CCAGGGCAAG GGTCTGGGCA GCGCCGCTCGT GCTCCCCGA GTGGAGGCGG  
 CCGAGCGCGC CGGGGTGCC GCCTTCTTGG AGACCTCCG GCCCACAACT CCCCCCTTCT ACGAGCGGCT  
 CGGCTTACC GTCACCGCCG ACGTCGAGGT GCCCGAAGGA CCGCGCACCT GGTGCATGAC CCGCAAGCCC  
 GGTGCCTGAC GCCCGCCCA CGACCCGACG CGCCGACCG AAAGGAGCGC ACGACCCAT GCATCGATGA  
 TATCAGATCC CCGGATGCA GAAATTGATG ATCTATTA CAATAAAGAT GTCCACTAAA ATGGAAGTTT  
 TTCTGTCTAT ACTTTGTTAA GAAGGGTGA AACAGAGTAC CTACATTTT AATGGAAGGA TTGAGCTAC  
 GGGGTGGGG GTGGGTGGG ATTAGATAAA TGCTGTCTT TTAAGTGAAG CTCTTTACTA TTGCTTTATG  
 ATAATGTTT ATAGTTGGAT ATCATAATTT AAACAAGCAA AACCAAATTA AGGGCCAGCT CATTCTCTCC  
 ACTCATGATC TATAGATCTA TAGATCTCTC GTGGGATCAT TGTTTTTCTT TTGATTTCCA CTTTGTGGTT  
 CTAAGTACTG TGGTTTCAA ATGTGTCAGT TTCATAGCCT GAAGAACGAG ATCAGCAGCC TCTGTTCCAC  
 ATACACTTCA TTCTCAGTAT TGTTTTGCCA AGTTCATTA CCATCAGAAG CTGGTCGAGA TCCGGAACCC  
 TTAATATAAC TTCGTATAAT GTATGCTATA CGAAGTTATT AGGTCCCTCG AAGAGGTTCA CTAGGCGCGC  
 CACCACGGGC AACGGTCTGG TGCTCTGGAC CGTGTTCGG AGCAGCCGGG AGAAGAGGCG CTCAGCTGAT  
 ATCTTCATG CTAGCCTGGC GGTGGCTGAC CTGACCTTCG TGGTGACGCT GCCCCTGTGG GCTACCTACA  
 CGTACCGGGA CTATGACTGG CCCTTTGGGA CTTTCTCTG CAAGCTCAGC AGCTACCTCA TCTTCGTCAA  
 CATGTACGCC AGCGTCTTCT GCCTCACCGG CCTCAGCTTC GACCGCTACC TGGCCATCGT GAGGCCAGTG  
 GCCAATGCTC GGCTGAGGCT GCGGGTCAGC GGGGCCGTGG CCACGGCAGT TCTTTGGGTG CTGGCCGCC  
 TCCTGGCCAT GCCTGTCATG GTGTTACGCA CCACCGGGGA CTTGGAGAAC ACCACTAAGG TGCAGTGCTA

CATGGACTAC TCCATGGTGG CCACTGTGAG CTCAGAGTGG GCCTGGGAGG TGGGCCTTGG GGTCTCGTCC  
 ACCACCGTGG GCTTTGTGGT GCCCTTCACC ATCATGCTGA CCTGTTACTT CTTCATCGCC CAAACCATCG  
 CTGGCCACTT CCGCAAGGAA CGCATCGAGG GCCTGCGGAA GTCACTCTCG CCGGTTGGAC TTTAGATCAG  
 AAGGGATCTT GCTGCCGCC GAAAGAGGAA GGGCTGGAAG AGGAAGGAGC TTGGCGTAAT CATGGTCATA  
 GCTGTTTCTT GTGTGAAATT GTTATCCGCT CACAATTCCA CACAACATAC GAGCCGGAAG CATAAAGTGT  
 AAAGCCTGGG GTGCCTAATG AGTGAGCTAA CTCACATTAA TTGCGTTGCG CTCACTGCCC GCTTTCCAGT  
 CGGGAAACCT GTCGTGCCAG CTGCATTAAT GAATCGGCA ACGCGCGGGG AGAGGCGGTT TGCATATTGG  
 GCGCTCTTCC GCTTCTCGC TCACTGACTC GCTGCGCTCG GTCGTTGCGC TCGGGCGAGT GGTATCAGCT  
 CACTCAAAGG CGGTAATACG GTTATCCACA GAATCAGGGG ATAACGCAGG AAAGAACATG TGAGCAAAAAG  
 GCCAGCAAAA GGCCAGGAAC CGTAAAAAGG CCGCGTTGCT GGCGTTTTTC CATAGGCTCC GCCCCCCTGA  
 CGAGCATCAC AAAAATCGAC GCTCAAGTCA GAGGTGGCGA AACCCGACAG GACTATAAAG ATACCAGGCG  
 TTTCCCCCTG GAAGCTCCCT CGTGCGCTCT CCTGTTCCGA CCCTGCCGCT TACCGGATAC CTGTCCGCT  
 TTCTCCCTTC GGAAGCGTG GCGCTTTCTC ATAGCTCAG CTGTAGGTAT CTCAGTTCGG TGTAGGTCGT  
 TCGCTCCAAG CTGGGCTGTG TGCACGAACC CCCCCTCAG CCCGACCCT GCGCCTTATC CGGTAACTAT  
 CGTCTTGAGT CCAACCCGGT AAGACACGAC TTATCGCCAC TGGCAGCAGC CACTGGTAAC AGGATTAGCA  
 GAGCGAGGTA TGAGGCGGT GCTACAGAGT TCTTGAAGTG GTGGCCTAAC TACGGCTACA CTAGAAGAAC  
 AGTATTTGGT ATCTGCGCTC TGCTGAAGCC AGTTACCTC GGAAAAAGAG TTGGTAGCTC TTGATCCGGC  
 AAACAAACCA CGCTGGTAG CCGTGGTTTT TTTGTTTGA AGCAGCAGAT TACGCGCAGA AAAAAAGGAT  
 CTCAGAAGA TCCTTTGATC TTTTCTACGG GGTCTGACGC TCAGTGGAAC GAAAACCTAC GTTAAGGGAT  
 TTTGGTCATG AGATTATCAA AAAGGATCTT CACCTAGATC CTTTTAAATT AAAAATGAAG TTTTAAATCA  
 ATCTAAAGTA TATATGAGTA AACTTGGTCT GACAGTTACC AATGCTTAAT CAGTGAGGCA CCTATCTCAG  
 CGATCTGTCT ATTTCTGTTCA TCCATAGTTG CCTGACTCCC CGTCGTGTAG ATAACCTACG TACGGGAGGG  
 CTTACCATCT GGCCCCAGTG CTGCAATGAT ACCGCGAGAA CCACGCTCAC CGGCTCCAGA TTTATCAGCA  
 ATAAACCAGC CAGCCGGAAG GGCCGAGCGC AGAAGTGGTC CTGCAACTTT ATCCGCTCC ATCCAGTCTA  
 TTAATTGTTG CCGGGAAGCT AGAGTAAGTA GTTCGCCAGT TAATAGTTTG CGCAACGTTG TTGCCATTGC  
 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

**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\\_005161](#), [NR\\_027991](#)

**UniProt ID:**

[P35414](#)

**Synonyms:**

AGTRL1; APJ; APJR; HG11

**Summary:**

This gene encodes a member of the G protein-coupled receptor gene family. The encoded protein is related to the angiotensin receptor, but is actually an apelin receptor that inhibits adenylate cyclase activity and plays a counter-regulatory role against the pressure action of angiotensin II by exerting hypertensive effect. It functions in the cardiovascular and central nervous systems, in glucose metabolism, in embryonic and tumor angiogenesis and as a human immunodeficiency virus (HIV-1) coreceptor. Two transcript variants resulting from alternative splicing have been identified. [provided by RefSeq, Jul 2009]

Product images:

