

Product datasheet for **KN208674**

ApoER2 (LRP8) 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: ApoER2
Locus ID: 7804
Components: **KN208674G1**, ApoER2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCGGCTGATCCGCTGCTCGG
KN208674G2, ApoER2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAGACCGGCTGCACGCACCT
KN208674D, 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 GTATGCGGCG
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG 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 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
GGGTCGAGGT 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 GGCGCCATC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGCTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGAGT GGAGAGGACT TTTACTGACT GACTGACTGG AAGACACACC
```



[View online »](#)

TATCTTGGGA TCTCACCCCT ATCCCTCCCT CCCCCGCCCC ACGCGCACAC TGCACAGGCC TGTTCTGCCT
 GTAACATCAT TTCCCTCCC GCCCAGGCTC ACTCCTAGAC ATCCCTCAGC CTCTGATCCG CCTGTACACT
 CCTCCAGGAA GCCTCTGCTG CTTCTCTG GACCTGCTACC TCCGTGGTGA GGGGCTCGCC TGGCCCATCC
 CTGCGTCTGC AGAGCCCAGC ACTCAGGCGA GCCCAGAGCA GGGCCGTGGA GCGCCCCTG AGAGAAGAGT
 GGACGAAAGA CAGGAGGGAG GAGGGCGAGG AGGCGGCGGC AGGGGGAGCG TGGGGCGGAG GCGGCAGCGG
 GAGGGAGCGC GCGCGCTGGC GCGGCGCGCC CAGGGCCGGG GCCGCGCGCC CAGCCTGAGC CCGCCCCGCC
 GCCGAGCGTC ACCGAACCTG CTTGAAATGC AGCCGAGGAG CCGGGGCGGG GCGCAGCGGC GCGGCGGGC
 GCGGCGGGGG CAGCGGCAAC CCGGCGCGCG CGGCAAGGAC TCGGAGGGCT GAGACGCGGC GCGGCGGGC
 CCGGGAGCGC GGGGCGCGGC GCGGAGGCC CCGGGCCCGC CACTAGCATG GAGAGCGACG AGAGCGGCCT
 GCCCGCCATG GAGATCGAGT GCCGCATCAC CGGCACCCTG AACGGCGTGG AGTTCGAGCT GGTGGGCGGC
 GGAGAGGGCA CCCCCGAGCA GGGCCGCATG ACCAACAAGA TGAAGAGCAC CAAAGGCGCC CTGACCTTCA
 GCCCTACCT GCTGAGCCAC GTGATGGGCT ACGGCTTCTA CCACTTCGGC ACCTACCCCA GCGGCTACGA
 GAACCCCTTC CTGCACGCCA TCAACAACGG CGGCTACACC AACACCCGCA TCGAGAAGTA CGAGGACGGC
 GGGTGTCTGC ACGTGAGCTT CAGCTACCGC TACGAGGCCG GCCGCGTGAT CGGCGACTTC AAGGTGATGG
 GCACCGGCTT CCCCAGGAC AGCGTGATCT TCACCGACAA GATCATCCGC AGCAACGCCA CCGTGGAGCA
 CCTGCACCCC ATGGGCGATA ACGATCTGGA TGGCAGCTTC ACCCGCACCT TCAGCCTGCG CGACGCGCGC
 TACTACAGCT CCGTGGTGA CAGCCACATG CACTTCAAGA GCGCCATCCA CCCCAGCATC CTGCAGAACG
 GGGGCCCCAT GTTCGCCTTC CCGCGCGTGG AGGAGGATCA CAGCAACACC GAGCTGGGCA TCGTGGAGTA
 CCAGCACGCC TTCAAGACCC CGGATGCAGA TGCCGGTGA GAAAGAGTTT AAGAATTCCG ATCATATTCA
 ATAACCCTTA ATATAACTTC GTATAATGTA TGCTATACGA AGTTATTAGG TCTGAAGAGG AGTTTACGTC
 CAGCCAAGCT TAGGATCTCG ACCTCGAAT TCTACCGGT AGGGGAGGCG CTTTTCCAA GGCAGTCTGG
 AGCATGCGCT TTAGCAGCCC CGCTGGGCAC TTGGCGCTAC ACAAGTGGCC TCTGGCCTCG CACACATTCC
 ACATCCACCG GTAGGCGCCA ACCGACTCCG TTCTTTGGTG GCCCTTCGC CCACTTCT ACTCCTCCCC
 TAGTCAGGAA GTTCCCCCCC GCCCGCAGC TCGCGTGTG CAGGACGTGA CAAATGGAA TAGCAGTCT
 CACTAGTCTC GTGCAGATGG ACAGCACCGC TGAGCAATGG AAGCGGGTAG GCCTTTGGGG CAGCGGCCAA
 TAGCAGCTTT GCTCCTTCGC TTTCTGGGCT CAGAGGCTGG GAAGGGGTGG GTCCGGGGG GGGCTCAGGG
 GCGGGCTCAG GGGCGGGGCG GCGGCCGAA GGTCTCCGG AGGCCCGCA TTCTGCACGC TTCAAAGCG
 CACGTCTGCC GCGCTGTTCT CCTTTCCTC ATCTCCGGG CTTTCGACCT GCATCCATCT AGATCTCGAG
 CAGCTGAAGC TTACCATGAC CGAGTACAAG CCCACGGTGC GCCTCGCCAC CCGCGACGAC GTCCCCAGGG
 CCGTACGCAC CCTCGCCGCC GCGTTCGCG ACTACCCCGC CACGCGCCAC ACCGTCGATC CGGACCGCCA
 CATCGAGCGG GTCACCGAGC TGCAAGAACT CTTCTCACG CCGCTCGGGC TCGACATCGG CAAGGTGTGG
 GTCGCGGACG ACGGCGCGC GGTGGCGGTC TGGACCACGC CCGAGAGCGT CGAAGCGGGG GCGGTGTTCG
 CCGAGATCGG CCGCGCATG GCCGAGTTGA GCGGTTCCCG GCTGGCCGCG CAGCAACAGA TGGAAGGCCT
 CCTGGCGCGG CACCGGCCCA AGGAGCCCGC GTGGTTCCTG GCCACCCTCG GCGTCTCGCC CGACCACCAG
 GGCAAGGGTC TGGGAGCGC CGTCGTGCTC CCCGAGTGG AGGCGGCCGA GCGCGCCGGG GTGCCCGCCT
 TCCTGGAGAC CTCGCGGCC CACAACCTCC CTTTCTACGA GCGGCTCGGC TTCACCGTCA CCGCCGACGT
 CGAGGTGCCC GAAGGACCGC GCACCTGGTG CATGACCCG AAGCCCGGTG CCTGACGCC GCCCCACGAC
 CCGCAGCGCC CGACCGAAAG GAGCGCACGA CCCCATGCAT CGATGATATC AGATCCCCGG GATGCAGAAA
 TTGATGATCT ATTAACAAT AAAGATGTCC ACTAAAATGG AAGTTTTTCC TGTCATACTT TGTTAAGAAG
 GGTGAGAACA GAGTACCTAC ATTTTGAATG GAAGGATTGG AGCTACGGGG GTGGGGGTGG GGTGGGATTA
 GATAAATGCC TGCTCTTAC TGAAGGCTCT TTAATATTGC TTTATGATAA TGTTTCATAG TTGGATATCA
 TAATTTAAAC AAGCAAACC AAATTAAGGG CCAGTCTATT CCTCCACTC ATGATCTATA GATCTATAGA
 TCTCTCGTGG GATCATTGTT TTTCTCTTGA TTCCACTTT GTGGTTCTAA GACTGTGGT TTCAAATGT
 GTCAGTTTCA TAGCCTGAAG AACGAGATCA GCAGCCTCTG TTCCACATAC ACTTCATTCT CAGTATTGTT
 TTGCCAAGTT CTAATTCCAT CAGAAGCTGG TCGAGATCCG GAACCCTTAA TATAACTTCG TATAATGTAT
 GCTATACGAA GTTATTAGGT CCCTCGAAGA GGTTCACTAG GCGCGCCGGA GCGGGGAGG GTCCAGAACC
 CCGGGCTATC GGGGGTCCC GGGCGGACAG GCTCCACGCG AAGCGGCTAT TCCTGAATTT GCCCTCGGCC
 CCCC GCCGCGCTCG GTGTTGAGGG CTCTGCCCTC TGGGACGCGG ATCTTGGGGG AGGGGTGACG
 GGGGCTTGG CCAGCGGGGA ACTTTGCCGG AGGGGCGGCC ATTCATGGTT CCGGATGAGC TGTGTGATTC
 TCGCCGTTGG GGTTTATTTG ACACGCGCGC TCCGCGCGCG TAATGAGCAG AGCCGGGCGG CTTCTCCGCT
 TGACAATGCG TTTCCGAGA CCCCTGCGCG CCGCGGAGAG AGAGGGGGCT GCCTGCCAGG GTGATGTGCC
 TCGGCTCCC ACTGCGCCTG GCGCGCGGGC GCGGGGACTC CCTATGGGCT GTATCTGAGC AGATCTCTGA

CTATGGGTCG CGTGTGCCGG TGAGTGCCTC TGAATGGAGG GTATACCCAG GTCGTGTGAC ACTTTAAGTA
 GGTGCCTGGT CTCGCCGTGC CACCGAGCGG CCCGACATCC ACGGAACCCC TGCCATCGTG CCCTCCCTTT
 GGATGGAGTG TGCCTGAACG ACAGTCTTCA CTGACTGACT GACTGGAAAG AGGAAGGGCT GGAAGAGGAA
 GGAGCTTGGC GTAATCATGG TCATAGCTGT TTCCTGTGTG AAATTGTTAT CCGCTCACAA TTCCACACAA
 CATACGAGCC GGAAGCATAA AGTGATAAGC CTGGGGTGCC TAATGAGTGA GCTAACTCAC ATTAATTGGC
 TTGCGCTCAC TGCCCGCTTT CCAGTCGGGA AACCTGTCTG GCCAGCTGCA TTAATGAATC GGCCAACGCG
 CGGGGAGAGG CGGTTTGGCT ATTGGGCGCT CTTCGGCTTC CTCGCTCACT GACTCGCTGC GCTCGGTCTG
 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 CCTTCGGGAA GCGTGGCGCT TTCTCATAGC TCACGCTGTA
 GGTATCTCAG TTCGGTGTAG GTCGTTCCGCT CCAAGCTGGG CTGTGTGCAC GAACCCCCCG TTCAGCCCGA
 CCGCTGCGCC TTATCCGGTA ACTATCGTCT TGAGTCCAAC CCGTAAGAC ACGACTTATC GCCACTGGCA
 GCAGCCACTG GTAACAGGAT TAGCAGAGCG AGGTATGTAG GCGGTGCTAC AGAGTCTTGT AAGTGGTGGC
 CTAACACTAGG CTACACTAGA AGAACAGTAT TTGGTATCTG CGCTCTGCTG AAGCCAGTTA CCTTCGGAAA
 AAGAGTTGGT AGCTCTTGAT CCGGCAAACA AACCACCCTG GGTAGCCGTG GTTTTTTTGT TTGCAAGCAG
 CAGATTACGC GCAGAAAAA AGGATCTCAA GAAGATCCTT TGATCTTTTC TACGGGGTCT GACGCTCAGT
 GGAACGAAAA CTCACGTAA GGGATTTTGG TCATGAGATT ATCAAAAAGG ATCTTACCT AGATCCTTTT
 AAATTAATAA TGAAGTTTTA AATCAATCTA AAGTATATAT GAGTAAACTT GGTCTGACAG TTACCAATGC
 TTAATCAGTG AGGCACCTAT CTCAGCGATC TGTCTATTTT GTTCATCCAT AGTTGCCTGA CTCCCCGTCG
 TGTAGATAAC TACGATACGG GAGGGCTTAC CATCTGGCCC CAGTGTGCA ATGATACCGG GAGAACCACG
 CTCACCCGCT CCAGATTTAT CAGCAATAAA CCAGCCAGCC GGAAGGGCCG AGCGCAGAAG TGGTCTGCA
 ACTTTATCCG CCTCCATCCA GTCTATTAAT TGTTGCCGGG AAGCTAGAGT AAGTAGTTTC 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_001018054](#), [NM_004631](#), [NM_017522](#), [NM_033300](#)

UniProt ID:

[Q14114](#)

Synonyms:

APOER2; HSZ75190; LRP-8; MCI1

Summary:

This gene encodes a member of the low density lipoprotein receptor (LDLR) family. Low density lipoprotein receptors are cell surface proteins that play roles in both signal transduction and receptor-mediated endocytosis of specific ligands for lysosomal degradation. The encoded protein plays a critical role in the migration of neurons during development by mediating Reelin signaling, and also functions as a receptor for the cholesterol transport protein apolipoprotein E. Expression of this gene may be a marker for major depressive disorder. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jun 2011]

Product images:

