

Product datasheet for **KN302782**

Ccl2 Mouse 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:	Ccl2
Locus ID:	20296
Components:	KN302782G1 , Ccl2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGCTGGAGCATCCACGTGT KN302782G2 , Ccl2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGCTGTTACAGTTGCCGGC KN302782D , 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 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 AACCCCTAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACG CTGCGGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATCGCT AAGGAGAAAA TACCGCATCA GGCGCCATTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCCTTT CGCTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGAAGACACA
```



[View online »](#)

CCTCTGAAA ATATCTGGTA ACCACCAAGT GGAGAGAATG CTGTATTCAA CAAGGCCTGA TAACCAAGGA
 CTCAGCCGAC TTAGTGGGG TCCTTTCCCA GCTGCAAGGT TCCTTGAGCC AGGGGCAAGC TAGGCTGTGT
 TTCCAAGCAT CTTCTTCTA AGGACTTTAG GTTCTTGGC CACTTCCTTT TATTTTCAGT AAAGCAGAGC
 CACTCCATTC ACACTTGTGG TCACAGTAGT ACAATTACTG CCAATTCTTC CCTCTTTCCC CCCCCCCCC
 CCTACTCCCT GCGCAGCTTC ATTTGCTCCC AGGAGTGGCT AGAAAAATAC CAAATTCCAA CCCACAGTTT
 CTCTCTTCCA CTTCTGGAA ACACCCGAGG GCTCTGCAC TACTCAGCGG ATTCAACTTC CACTTTCCAT
 CACTTATCCA GGGTGTGCT ACTCCTTGGC ACCAAGCACC CTGCCTGACT CCACCCCTTC GGCTTACAAT
 AAAAGGCTGC CTCAGAGCAG CCAGAAGTGC AGAGAGCCAG ACGGGAGGAA GGCCAGCCCA GCACCAGCAC
 CAGCCAATC TCACTGAAGC CAGCTCTCTC TTCCTCCACC ACCACTAGCA TGGAGAGCGA CGAGAGCGGC
 CTGCCCGCCA TGGAGATCGA GTGCCGCATC ACCGGCACCC TGAACGGCGT GGAGTTCGAG CTGGTGGGCG
 GCGGAGAGGG CACCCCGAG CAGGGCCGCA TGACCAACA GATGAAGAGC ACCAAAGGCG CCCTGACCTT
 CAGCCCCTAC CTGCTGAGCC ACGTGATGGG CTACGGCTTC TACCACTTCG GCACCTACCC CAGCGGCTAC
 GAGAACCCCT TCCTGCACGC CATCAACAAC GCGGGCTACA CCAACACCCG CATCGAGAAG TACGAGGACG
 GCGGCGTGCT GCACGTGAGC TTCAGCTACC GCTACGAGGC CGGCCGCGTG ATCGGCGACT TCAAGGTGAT
 GGGCACCGGC TTCCCGAGG ACAGCGTGAT CTTACCCGAC AAGATCATCC GCAGCAACGC CACCGTGGAG
 CACCTGCACC CCATGGGCGA TAACGATCTG GATGGCAGCT TCACCCGCAC CTTCAGCCTG CGCGACGGCG
 GCTACTACAG CTCCGTGGTG GACAGCCACA TGCACTTCAA GAGCGCCATC CACCCAGCA TCCTGCAGAA
 CGGGGGCCCC ATGTTCCGCT TCCGCCGCGT GGAGGAGGAT CACAGCAACA CCGAGCTGGG CATCGTGGAG
 TACCAGCAGC CTTCAAGAC CCCGGATGCA GATGCCGGTG AAGAAAGAGT TTAAGAATTC CGATCATATT
 CAATAACCCT TAATATACT TCGTATAATG TATGCTATAC GAAGTTATTA GGTCTGAAGA GGAGTTTACG
 TCCAGCCAAG CTTAGGATCT CGACCTCGAA ATTCTACCGG GTAGGGGAGG CGTTTTTCCC AAGGCAGTCT
 GGAGCATCGC CTTTAGCAGC CCCGTGGGC ACTTGGCGCT ACACAAGTGG CCTCTGGCCT CGCACACATT
 CCACATCCAC CGGTAGGCGC CAACGACTC CGTTCTTTGG TGGCCCTTC GCGCCACTT CTACTCTCC
 CCTAGTCAGG AAGTTCCCCC CGCCCCGCA GCTCGCGTCG TGCAGGACGT GACAAATGGA AGTAGCACGT
 CTACTAGTC TCGTGCAGAT GGACAGCACC GCTGAGCAAT GGAAGCGGGT AGGCCTTTGG GGCAGCGGCC
 AATAGCAGCT TTGCTCCTC GCTTTCTGGG CTCAGAGGCT GGAAGGGGT GGGTCCGGGG GCGGGCTCAG
 GGGCGGGCTC AGGGGCGGGG CGGGCGCCG AAGGTCTCC GGAGGCCCGG CATTCTGCAC GCTTCAAAG
 CGCACGTCTG CCGCGCTGTT CTCCTCTTCC TCATCTCCGG GCCTTTCGAC CTGCATCCAT CTAGATCTCG
 AGCAGCTGAA GCTTACCATG ACCGAGTACA AGCCACGGT GCGCCTCGCC ACCCGCAGC ACGTCCCCAG
 GGGCGTACG ACCCTCGCG CCGCGTTCG CACTACCC GCCACGCGCC ACACCGTGA TCCGGACCGC
 CACATCGAGC GGGTCACCGA GCTGCAAGAA CTCTTCTCA CGCGCGTCGG GCTCGACATC GGCAAGGTGT
 GGGTCGCGGA CGACGGCGCC GCGGTGGCGG TCTGACCAC GCCGGAGAGC GTCGAAGCGG GGGCGGTGTT
 CGCCGAGATC GGCCCGCGCA TGGCCGAGTT GAGCGGTTCC CGGCTGGCCG CGCAGCAACA GATGGAAGGC
 CTCTGGCGC CGCACCGGCC CAAGGAGCCC GCGTGGTTCC TGGCCACCGT CGGCGTCTCG CCCGACCACC
 AGGGCAAGGG TCTGGGCAGC GCCGTCGTGC TCCCCGAGT GGAGGCCGCC GAGCGCGCCG GGGTCCCCGC
 CTTCTGGAG ACCTCCGCGC CCCACAACCT CCCCTTCTAC GAGCGGCTCG GCTTACCGT CACCGCCGAC
 GTCGAGGTGC CCGAAGGACC GCGCACCTGG TGCATGACCC GCAAGCCCGG TGCCTGACGC CCGCCCCAG
 ACCCGCAGCG CCCGACCGAA AGGAGCGCAT GACCCCATGC ATCGATGATA TCAGATCCCC GGGATCGAGA
 AATTGATGAT CTATTAACA ATAAAGATGT CCACTAAAAT GGAAGTTTTT CCTGTCATC TTTGTTAAGA
 AGGGTGAGAA CAGAGTACCT ACATTTTGAA TGAAGGATT GGAGCTACGG GGGTGGGGT GGGGTGGGAT
 TAGATAAATG CCGTCTCTT ACTGAAGGCT CTTTACTATT GCTTTATGAT AATGTTTCAT AGTTGGATAT
 CATAATTTAA ACAAGCAAAA CCAAAATTAAG GGCCAGCTCA TTCCTCCAC TCATGATCTA TAGATCTATA
 GATCTCTCGT GGGATCATTG TTTTCTCTT GATTCCACT TTGTGGTTCT AAGTACTGTG GTTTCCAAAT
 GTGTCAGTTT CATAGCCTGA AGAACGAGAT CAGCAGCTC TGTTCCACAT ACACTTCATT CTCAGTATTG
 TTTTGCCAAG TTCTAATTCC ATCAGAAGCT GGTCGAGATC CGGAACCCTT AATATAACTT CGTATAATGT
 ATGCTATACG AAGTTATTAG GTCCTCGAA GAGGTTCACT AGGCGCGCCT **CCCTTCCAG** **CATATCACCC**
CATTTTTGAA **TTGTCGTGGA** **TTGTGATAG** **ATAGTCTCAC** **ATGGTCAGG** **ACTTTTTTTT** **TTTTCTTTAA**
CCAAGATAAG **GAGCATAAAG** **AAGGAAGGAC** **AAAGAGCCAA** **CCCAATTACA** **AGATTGCTTC** **TGGAAGCAA**
CTAGAATTTT **AATTGTTAGA** **TCTAAATTTG** **GAATCACACC** **TTCATATAGT** **TCCTGTTC** **GTTACTTCCC**
TCAGTATTTG **GGAACCTGGG** **TGATCAAACA** **GAGGCTTGGG** **TTGGTGCCTT** **TTTCCAGATA** **GAGGAGAAAG**
GGGAAGAGAT **CCAAGATCCG** **AGCTGTGTTT** **CACCCAGCCC** **TGCTTCCAGA** **GATAGCAGCT** **TAGCGGAGGT**
GGTTGGGATC **AGAGATACTC** **ATGATTTGAT** **TTTTTTTTTT** **TTTTTTTTTT** **TTTTTTTTTT** **TTTGCAGCCT**

ACAGTAATGT ACTCAGGTAA TCTTCTCAGG TCATAGTAAT TTGACTTCTA ACTCCCCCAA ATGACAGTCC
 CCAGAGTCAC ATAGTTTTAA TGGCATCCCT CTACCCAAGA CTGTGAGCCT ACTTTAAGCT GCAAATAACT
 GAGTCTGTTG TCAAAGATCA CGACAGTCTT CACTGACTGA CTGACTGGAA AGAGGAAGGG CTGGAAGAGG
 AAGGAGCTTG GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC AATTCCACAC
 AACATACGAG CCGGAAGCAT AAAGTGTAAA GCCTGGGGTG CCTAATGAGT GAGCTAACTC ACATTAATTG
 CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC GTGCCAGCTG CATTAAATGAA TCGGCCAACG
 CGCGGGGAGA GCGGTTTTGC GTATTGGGCG CTCTTCCGCT TCCTCGCTCA CTGACTCGCT GCGCTCGGTC
 GTTCGGCTGC GCGGAGCGGT ATCAGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA TCAGGGGATA
 ACGCAGGAAA GAACATGTGA GCAAAAAGCC AGCAAAAAGC CAGGAACCGT AAAAAGGCCG CGTTGCTGGC
 GTTTTTCCAT AGGCTCCGCC CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG GTGGCGAAAC
 CCGACAGGAC TATAAGATA CCAGGCGTTT CCCCTGGAA GCTCCCTCGT GCGCTCTCCT GTTCCGACCC
 TGCCGCTTAC CGGATACCTG TCCGCCTTTC TCCCTTCGGG AAGCGTGGCG CTTTCTCATA GCTCACGCTG
 TAGGTATCTC AGTTCGGTGT AGGTCGTTG CTCCAAGCTG GGCTGTGTGC ACGAACCCCG CGTTCAGCCC
 GACCGCTGCG CTTATCCGG TAACTATCGT CTTGAGTCCA ACCCGTAAG ACACGACTTA TCGCCACTGG
 CAGCAGCCAC TGGAACAGG ATTAGCAGAG CGAGGTATGT AGCGGGTCT ACAGAGTTCT TGAAGTGGTG
 GCCTAACTAC GGCTACACTA GAAGAACAGT ATTTGGTATC TCGCTCTGCG TGAAGCCAGT TACCTTCGGA
 AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG TGGTTTTTTT GTTTGCAAGC
 AGCAGATTAC GCGCAGAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT TCTACGGGGT CTGACGCTCA
 GTGGAACGAA AACTCACGTT AAGGGATTTT GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT
 TAAATTTAAA AATGAAGTTT TAAATCAATC TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT
 GCTTAATCAG TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCCCT GACTCCCCGT
 CGTGATAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC GCGAGAACCA
 CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC CGAGCGCAGA AGTGGTCCTG
 CAACCTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA
 TAGTTTGC GC AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA
 TTCAGCTCCG GTTCCCAACG ATC

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_011333](#)

UniProt ID:

[P10148](#)

Synonyms:

AI323594; HC11; JE; MCAF; MCP-1; MCP1; Scya2; Sigje; SMC-CF

Summary:

This gene is one of several cytokine genes clustered on chromosome 11. Chemokines are a superfamily of secreted proteins involved in immunoregulatory and inflammatory processes. The superfamily is divided into four subfamilies based on the arrangement of N-terminal cysteine residues of the mature peptide. This chemokine is a member of the CC subfamily which is characterized by two adjacent cysteine residues. This cytokine displays chemotactic activity for monocytes and memory T cells but not for neutrophils. The human ortholog has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, such as psoriasis, rheumatoid arthritis, and atherosclerosis. [provided by RefSeq, Sep 2015]

Product images:

