

Product datasheet for **KN208654**

CD31 (PECAM1) 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:	CD31
Locus ID:	5175
Components:	KN208654G1 , CD31 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGGACTCCAAGCCACATCG KN208654G2 , CD31 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TAAACACTCACAGAGCAGAA KN208654D , 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 AGTTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCACAG 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 CAGCTTGCTT GTAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAAATCCC TTATAAATCA 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 CGTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GCGTCTCACA

```



View online »

AGCAGCCTGC CCCAGCAGCA GGTCTCTTTG ACAAACCTGC AATTTTGGGG AAAAGTCAGC CCAAGAAAGG
 CAGGGGGCCC AGACTTATGC TGTGTGGCAA AAGCCCTCTT TGATGGGGGA AGGGGAGGAC TGGAAAAGCA
 GAGAGATCTT TCTGGATGTC CTGGGAGAGC AGCCCTTTGG GTGGTGGGTG GAGGCTGGAG GCAGGGAGGA
 ATCCCCTCAC AGTGCCATGA GAAGGGCCCC CAAACCCAGG CGAGACAGAG GGAGGGTCAA GAACGCCAAG
 GCAAAATGCA CTTGTGCCTT GTTTTTTCCC TAAAGAACT AAACAAAGCG GCCCGTTCCG GTGGCCCTC
 AGGAAGGCCG GTCATTTCT GAGGAGATAT CAGGCCAGCC CAGGCCCAT TGTTCCCGGT TTCCAGCCAT
 GGTGCTTCTT ACCTGACCAG CGCCACAGCC GGTCTCTCTG CAGGCGCCGG GAGAAGTGAC CAGAGCAATT
 TCTGCTTTTC ACAGGGCGGG TTTCTCAACG GTGACTTGTG GGCAGTGCCT TCTGCTGAGC GAGTCATGGC
 CCGAAGGCAG AACTAACTGT GCCTGCAGTC TTCACTCTCA GGCCTAGCAT 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 GCGACGGCGG
 CTACTACAGC TCCGTGGTGG ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC
 GGGGGCCCCA TGTTGCGCTT CCGCCGCGTG GAGGAGGATC ACAGCAACAC CGAGCTGGGC ATCGTGGAGT
 ACCAGCACGC CTTCAAGACC CCGGATGCAG ATGCCGGTGA AGAAAGAGTT TAAGAATTCC GATCATATTC
 AATAACCCTT 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 AGTTCSCCCC CGCCCCGAG CTCGCGTCTG GCAGGACGTG ACAAATGGAA GTAGCACGTC
 TCACTAGTCT CGTGCAGATG GACAGCACCG CTGAGCAATG GAAGCGGGTA GGCCTTTGGG GCAGCGGCCA
 ATAGCAGCTT TGCTCCTTCG CTTTCTGGGC TCAGAGGCTG GGAAGGGGTG GGTCCGGGGG CGGGCTCAGG
 GGCGGGCTCA GGGGCGGGG GGGCGCCCGA AGGTCTCCG GAGGCCCGGC ATTCTGCACG CTTCAAAAGC
 GCACGTCTGC CGCGCTGTTC TCCTTCTCT CATCTCCGGG CCTTTCGACC TGCATCCATC TAGATCTCGA
 GCAGCTGAAG CTTACCATGA CCGAGTACAA GCCACGGTG CGCCTCGCCA CCCGCGACGA CGTCCCAGG
 GCCGTACGCA CCCTCGCCG CGCGTTCCGC GACTACCCG CCACGCGCCA CACCGTCGAT CCGGACCGCC
 ACATCGAGCG GGTACCCGAG CTGCAAGAAC TTTCTCTCAC GCGCGTCGGG CTCGACATCG GCAAGGTGTG
 GGTGCGGAC GACGGCGCCG CGGTGGCGGT CTGGACCACG CCGGAGAGCG TCGAAGCGGG GCGCGTGTTC
 GCCGAGATCG GCCCGCGCAT GGCCGAGTTG AGCGGTTCCC GGCTGGCCG GCAGCAACAG ATGGAAGGCC
 TCCTGGCGCC GCACCGGCC AAGGAGCCCG CGTGGTTCTT GGCCACCGTC GGCGTCTCGC CCGACCACCA
 GGGCAAGGGT CTGGGACGCG CCGTCGTGCT CCCCAGGAGT GAGGCGGCCG AGCGCGCCGG GGTGCCCGCC
 TTCTGGAGA CCTCCGCGCC CCAACAACCT CCCTTCTACG AGCGGCTCGG CTTACCGTC ACCGCCGACG
 TCGAGGTGCC CGAAGGACCG CGCACCTGGT GCATGACCCG CAAGCCCGGT GCCTGACGCC CGCCCCACGA
 CCCGCAGCGC CCGACCGAAA GGAGCGCACG ACCCATGCA TCGATGATAT CAGATCCCCG GGATGCAGAA
 ATTGATGATC TATTAACAA TAAAGATGTC CACTAAAATG GAAGTTTTTC CTGTCATACT TTGTTAAGAA
 GGGTGAGAAC AGAGTACCTA CATTTTGAAT GGAAGGATTG GAGCTACGGG GGTGGGGGTG GGTGGGATT
 AGATAAATGC CTGCTCTTTA CTGAAGGCTC TTTACTATTG CTTTATGATA ATGTTTCATA GTTGATATC
 ATAATTTAAA CAAGCAAAAC CAAATTAAGG GCCAGCTCAT TCCTCCCACT CATGATCTAT AGATCTATAG
 ATCTCTCGTG GGATCATTGT TTTTCTCTTG ATTCCACTT TGTGGTTCTA AGTACTGTGG TTTCCAAATG
 TGTCAGTTTC ATAGCCTGAA GAACGAGATC AGCAGCCTCT GTTCCACATA CACTTCATTC TCAGTATTGT
 TTTGCCAAGT TCTAATTCCA TCAGAAGCTG GTCGAGATCC GGAACCCTTA ATATAACTTC GTATAATGTA
 TGCTATACGA AGTTATTAGG TCCCTCGAAG AGTTCACTA GGCGCGCTA ACTCCATGAG CATCGAAGCT
 TCTGGAATCA ACATGTTTCT TATGTTTCTT GCAGGTTCAA GCCTTGAGGG TCAAGAAAAC TGTAAGTCTG
 ATGTTTCCAC TGTAACAGAT GTTCTACCT GGCTTCCTCC TTTCTCTCT GTGATGCCTA AAACGCACAT
 TAAATTGCTG GGGTTTGATA CTTCTAACAA TTAAGGAAAA GAATCCAATT GAGAATAAA GTTTATCCCA
 TGTGGGCATT TTTAGAAAAG CTTAGATCTA AGCCAAGTTC TGGTCAGTGT GTTTTAGAAG TAGCACACGT
 TTCCTGGCT GGTCTGAAAG TAGTGGGTTA TCTTGATGAA TTGTTTAGTC AGTTACAGAT CAAACTCCAT
 GTTCTTTTCT CTGTTCTCAC GACTACTCTT GACTAGTCTA AAAATATATT AGTTGTTGC AAAGTAATTG

```

TGGTTTTGC CATTACTTTT TTAAAAGATG GCAAAAAACA CAATTATAAG TAGCACACAT TTTCTTTTTT
TTTTCTTTT TTTTTGAGA CAGAGTCTCT GTTACCCAGG CTGGAGTGCA GTGGTGCAAT CCCGGCTCTC
TGCAAACCTCC GCCTCCTGCT ACAGAGACGC GCGTCCGAGA GTTATTCTCT CTTGACAAC AAACCAAGCG
CAGTGCCGTT CACTCTCGCC GGTGGACTT TAGATCAGAA GGGATCTTGC TGCCGCCGA AAGAGGAAGG
GCTGGAAGAG GAAGGAGCTT GGCCTAATCA TGGTCATAGC TGTTTCCTGT GTGAAATTGT TATCCGCTCA
CAATTCCACA CAACATACGA GCCGGAAGCA TAAAGTGTA AGCCTGGGGT GCCTAATGAG TGAGCTAACT
CACATTAATT GCGTTGCGCT CACTGCCCGC TTTCCAGTCG GGAAACCTGT CGTGCCAGCT GCATTAATGA
ATCGGCCAAC GCGCGGGGAG AGGCGGTTTG CGTATTGGGC GCTCTTCCGC TTCTCGCTC ACTGACTCGC
TGCCTCGGT CGTTCGGCTG CCGCGAGCGG TATCAGTCA CTCAAAGGCG GTAATACGGT TATCCACAGA
ATCAGGGGAT AACGCAGGAA AGAACATGTG AGCAAAAGGC CAGCAAAAGG CCAGGAACCG TAAAAAGGCC
GCGTTGCTGG CGTTTTTCCA TAGGCTCCGC CCCCTGACG AGCATCACA AAATCGACGC TCAAGTCAGA
GGTGGCGAAA CCCGACAGGA CTATAAAGAT ACCAGGCGTT TCCCCCTGGA AGCTCCCTCG TGCGCTCTCC
TGTTCCGACC CTGCCGTTA CCGGATACCT GTCCGCCTTT CTCCCTTCGG GAAGCGTGGC GCTTTCTCAT
AGCTCACGCT GTAGGTATCT CAGTTCGGTG TAGGTCGTTT GCTCCAAGCT GGGCTGTGTG CACGAACCCC
CCGTTACGCC CGACCGCTGC GCCTTATCCG GTAACTATCG TCTTGAGTCC AACCCGTAA GACACGACTT
ATCGCCACTG GCAGCAGCA CTGGTAACAG GATTAGCAGA GCGAGGTATG TAGGCGGTGC TACAGAGTTC
TTGAAGTGGT GGCCTAACTA CGGCTACACT AGAAGAACAG TATTTGGTAT CTGCGCTCTG CTGAAGCCAG
TTACCTTCGG AAAAAGAGTT GGTAGCTCTT GATCCGGCAA ACAAAACCACC GCTGGTAGCG GTGGTTTTTT
TGTTTGCAAG CAGCAGATTA CGCGCAGAAA AAAAGGATCT CAAGAAGATC CTTTGATCTT TTCTACGGGG
TCTGACGCTC AGTGAACGA AAACCTACGT TAAGGGATTT TGGTCATGAG ATTATCAAAA AGGATCTTCA
CCTAGATCCT TTTAAATTA AAATGAAGTT TAAATCAAT CTAAGTATA TATGAGTAAA CTTGGTCTGA
CAGTTACCAA TGCTTAATCA GTGAGGCACC TATCTCAGCG ATCTGTCTAT TTCGTTATC CATAGTTGCC
TGACTCCCCG TCGTGTAGAT AACTACGATA CGGGAGGGCT TACCATCTGG CCCAGTGCT GCAATGATAC
CGCGAGAACC ACGCTCACCG GCTCCAGATT TATCAGCAAT AAACCAGCCA GCCGGAAGGG CCGAGCGCAG
AAGTGGTCTT GCAACTTTAT CCGCTCCAT CCACTTATT AATTGTTGCC GGAAGCTAG AGTAAGTAGT
TCGCCAGTTA ATAGTTTGGC CAACGTTGTT GCCATTGCTA CAGGCATCGT GGTGTCACGC TCGTCGTTTT
GTATGGCTTC ATTCAGCTCC GGTTCCTAAC GATC

```

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_000442](#)

UniProt ID:

[P16284](#)

Synonyms:

CD31; CD31/EndoCAM; endoCAM; GPIIA; PECA1; PECAM-1

Summary:

The protein encoded by this gene is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. [provided by RefSeq, May 2010]

Product images:

