

Product datasheet for **KN203597**

RUNX3 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: RUNX3
Locus ID: 864
Components: **KN203597G1**, RUNX3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCGGATGAAGGTCGGCGAGT
KN203597G2, RUNX3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGGGCTATTGTTACTCACCG
KN203597D, 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 TTATCAGGTG TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAACA AATAGGGGTT CCGCGCAT TCCCCGAAA 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 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 GGCGCCATC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAGG CTGTCGCCGT GCTCATTTGA
```



[View online »](#)

TAACTGCCCG TTATTCATGC GACACGGGTT GACACTGGGA AGGCCTGGTC CCTCAACCAC AGAACCACAA
 GGCCAGGCC TTGCCGCCTC CAGGGCCCTG CGCGGGAGCT GGTTGGCTCC TGGTGCTCCC CACCCCGGC
 CGCCCTCGTA CCCACCAGAG CCTGGGCTCT GTCAAGGTA AGCCTCATTC ATTATTCCC CGTGGCACTG
 GAGGCGGCC ACTCTGCTCT GTCAGTTCG GAGCTCTCC ACCCTGGCTG CCGAAAGCCC CTTCCCGCA
 TCTAATGATA CACTCTGCAT ACGTCTGT TGAGAATTTG TGGCTAGACA TTCCTGTGG ACCGGGAATC
 CAAATCTTG GGTACAAACA GAACTTACT TTCCTGGGG ATTTTTTCT CTCTCTACT CACACACT
 CTGCGTCTT TTCCTTTTT CTTTTCTGA GCAGCAGGGG GGAAAAAGA GACAAAAACA AAACAAAAA
 CAACAAAAAG CAACACCCC CCCTTTTATT TTCAAAAGTA GCTAGAGGAA AAAAAAATAA AACAAACAGCC
 AACCAAGTGA ATCCAACCC AACCCCTGA AGGGCTGAAA ATTCTCGCCT TCTTCAGAGC GGGGCACTAG
 CATGGAGAGC GACGAGAGCG GCCTGCCCGC CATGGAGATC GAGTGCCGCA TCACCGGCAC CCTGAACGGC
 GTGGAGTTCG AGCTGGTGGG CGGCGGAGAG GGCACCCCG AGCAGGGCCG CATGACCAAC AAGATGAAGA
 GCACAAAGG CGCCTGACC TTCAGCCCT ACCTGCTGAG CCACGTGATG GGCTACGGCT TCTACCACTT
 CGGCACCTAC CCCAGCGGCT ACGAGAACC CTTCTGCAC GCCATCAACA ACGGCGGCTA CACCAACACC
 CGCATCGAGA AGTACGAGGA CGGCGGCGTG CTGCACGTGA GCTTCAGCTA CCGCTACGAG GCCGGCCGG
 TGATCGGCGA CTTCAAGGTG ATGGGCACCG GCTTCCCGA GGACAGGTG ATCTTACC ACCAAGATCAT
 CCGCAGCAAC GCCACCGTGG AGCACCTGCA CCCATGGGC GATAACGATC TGGATGGCAG CTTACCCGC
 ACCTTCAGCC TGC GCGACGG CGGCTACTAC AGCTCCGTGG TGGACAGCCA CATGCACCTT AAGAGCGCCA
 TCCACCCAG CATCCTGCAG AACGGGGGCC CCATGTTCCG CTTCCGGCCG GTGGAGGAGG ATCACAGCAA
 CACCGAGCTG GGCATCGTGG AGTACCAGCA CGCCTTCAAG ACCCCGGATG CAGATGCCGG TGAAGAAAGA
 GTTAAAGAAT TCCGATCATA TTCAATAACC CTTAATATAA CTTCTGATAA TGTATGCTAT ACGAAGTTAT
 TAGGTCTGAA GAGGAGTTTA CGTCCAGCCA AGCTTAGGAT CTCGACCTCG AAATTCTACC GGGTAGGGGA
 GCGCTTTTC CCAAGGCAGT CTGGAGCATG CGCTTAGCA GCCCGCTGG GCACCTGGG CTACACAAGT
 GGCCTCTGGC CTCGCACACA TTCCACATCC ACCGTAGGC GCCAACCGAC TCCGTTCTT GTTGGCCCT
 TCGCGCCACC TTCTACTCCT CCCTAGTCA GGAAGTTCCC CCCC GCCCG CAGCTCGCTG CGTGCAGGAC
 GTGACAAATG GAAGTAGCAC GTCTACTAG TCTCGTGAG ATGGACAGCA CCGCTGAGCA ATGGAAGCGG
 GTAGGCCTTT GGGGAGCGG CCAATAGCAG CTTTGTCTCT TCGCTTCTG GGCTCAGAGG CTGGGAAGGG
 GTGGGTCCGG GGGCGGCTC AGGGGCGGG TCAGGGGCGG GCGGGCGCC CGAAGGTCT CCGGAGGCC
 GGCATTCTGC ACGCTTCAA AGCGCACGTC TGCCGCGCTG TTCTCTCTT CCTCATCTC GGGCCTTTCG
 ACCTGCATCC ATCTAGATCT CGAGCAGCTG AAGCTTACCA TGACCGAGTA CAAGCCACG GTGCGCCTCG
 CCACCCGCGA CGAGTCCC AGGGCCGTAC GCACCCTCG CGCCGCTTC GCCGACTACC CCGCCACGG
 CCACACCGTC GATCCGGACC GCCACATCGA GCGGGTACC GAGCTGCAAG AACTCTTCT CACGCGGTC
 GGGCTCGACA TCGCAAGGT GTGGGTGCGG GACGACGGCG CCGCGGTGG GGTCTGACC ACGCCGAGA
 GCGTCAAGC GGGGCGGTG TTCGCCGAGA TCGGCCCGC CATGGCCGAG TTGAGCGGT CCCGGCTGGC
 CGCGCAGCAA CAGATGGAAG GCCTCCTGGC GCCGACCGG CCAAGGAGC CCGCGTGGT CCTGGCCACC
 GTCGGCGTCT CGCCGACCA CCAGGGCAAG GGTCTGGCA GCGCCGCTCG GCTCCCCGA GTGGAGGCGG
 CCGAGCGCGC CGGGGTGCC GCCTTCTGG AGACCTCCG GCCCACAACT CCCCCCTTCT ACGAGCGGCT
 CGGCTTACC GTCACCGCCG ACGTCGAGGT GCCCGAAGGA CCGCGCACCT GGTGCATGAC CCGCAAGCCC
 GGTGCCTGAC GCCCGCCCA CGACCCGACG CGCCGACCG AAAGGAGCGC ACGACCCAT GCATCGATGA
 TATCAGATCC CCGGATGCA GAAATTGATG ATCTATTAA CAATAAAGAT GTCCACTAAA ATGGAAGTTT
 TTCTGTCTAT ACTTTGTTAA GAAGGTGAG AACAGAGTAC CTACATTTT AATGGAAGGA TTGGAGCTAC
 GGGGTGGG GTGGGTGGG ATTAGATAAA TGCTGTCTT TTAAGTAAAG CTCTTTACTA TTGCTTTATG
 ATAATGTTT ATAGTTGGAT ATCATAATTT AAACAAGCAA AACCAAATTA AGGGCCAGCT CATTCTCTCC
 ACTCATGATC TATAGATCTA TAGATCTCT GTGGATCAT TGTCTTCTT TTGATCCCA CTTTGTGGT
 CTAAGTACTG TGGTTTCAA ATGTGTCAGT TTCATAGCCT GAAGAACGAG ATCAGCAGC TCTGTTCCAC
 ATACACTTCA TTCTCAGTAT TGTCTTCCG AGTTCTAATT CCATCAGAAG CTGGTCGAGA TCCGGAACCC
 TTAATATAAC TTCGTATAAT GTATGCTATA CGAAGTTATT AGGTCCCTCG AAGAGTTTCA CTAGGCGCGC
 CCAGGCCCG GACCACGTCC CTCCTACTG CGCCTGGCT GCCCTCAAG GCACAGCTG TCCGCCTAAA
 TCCGCTGGCC TCTGAAAGCC TGAGGTGGGA AGAGGGTTG GTGGTCTCTG TGGTCTCTG GCGTGAACA
 TCGCTGTGGC ACTTTCATCC TCCGCTGGT GGGACAGTAA GCCGTGGGG CGATGGATC TCCAAGACCT
 CAAGACTCA AAGGGCAGCC CTCAGAGGG CCAAGGGAAA CTCTCAGGGA CCCTCGGCTT GCTGCTTAC
 TAACAGGGCC CCAGGGCTG CAGCCCCAGC CCCTGTCTG CCTGGGACTC CCCACCTGG CTCAGGAGGT
 CACTGCTGGC AACTTCTGGG GAGAGCTGTG GGATGCAGG GTCTTCTG AGACCACCG CAACATTTG

TGTGTAATC CTGGGTATC AGAAGCAGAG GGAGGAGAAG GAAGCCACAG GCTTTTGTGG AAAACTGCAC
 AGAGCTGGGC TGCACTGAAG CTGGACCTGC ACGGGGCAGG GGGACAGACC TCGAGAAAGT TCGTGGATTT
 GGCCACGGAA GAGGAGAAAG TGTTTTCTGG CAGCTTTTGC CTCACTCTCG 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 GAATCGGCCA ACGCGCGGGG AGAGGGGTT TCGTATTGG
 GCGCTCTTCC GCTTCTCGC TCACTGACTC GGTGCGCTCG GTCGTTGCGC TCGGGCAGC GGTATCAGCT
 CACTCAAAGG CGTAATACG GTTATCCACA GAATCAGGGG ATAACGCAGG AAAGAACATG TGAGCAAAAAG
 GCCAGCAAAA GGCCAGGAAC CGTAAAAAGG CCGCGTTGCT GGCGTTTTTC CATAGGCTCC GCCCCCTGA
 CGAGCATCAC AAAAATCGAC GCTCAAGTCA GAGGTGGCGA AACCCGACAG GACTATAAAG ATACCAGGCG
 TTTCCCTGCT GAAGCTCCCT CGTGCCTCT CCTGTTCCGA CCCTGCCGCT TACCGGATAC CTGTCCGCT
 TTCTCCCTTC GGAAGCGTG GCGCTTCTC ATAGCTCAG CTGTAGGTAT CTCAGTTCGG TGTAGGTCGT
 TCGCTCCAAG CTGGGCTGTG TGCACGAACC CCCCCTCAG CCCGACCCT GCGCCTTATC CGGTAECTAT
 CGTCTTGAGT CCAACCCGGT AAGACACGAC TTATCGCCAC TGGCAGCAGC CACTGGTAAC AGGATTAGCA
 GAGCGAGGTA TGTAGGCGGT GCTACAGAGT TCTTGAAGTG GTGGCCTAAC TACGGCTACA CTAGAAGAAC
 AGTATTTGGT ATCTGCGCTC TGCTGAAGCC AGTTACCTC GGAAAAAGAG TTGGTAGCTC TTGATCCGGC
 AAACAAACCA CCGCTGGTAG CCGTGGTTTT TTTGTTTGA AGCAGCAGAT TACGCGCAGA AAAAAAGGAT
 CTCAGAAGA TCCTTTGATC TTTTCTACGG GGTCTGACGC TCAGTGGAAC GAAAACCTCAC GTTAAGGGAT
 TTTGGTCATG AGATTATCAA AAAGGATCT CACCTAGATC CTTTTAAATT AAAAATGAAG TTTTAAATCA
 ATCTAAAGTA TATATGAGTA AACTTGGTCT GACAGTTACC AATGCTTAAT CAGTGAGGCA CCTATCTCAG
 CGATCTGTCT ATTTCTGTTCA TCCATAGTTG CCTGACTCCC CGTCGTGTAG ATAACCTACA TACGGGAGGG
 CTTACCATCT GGCCCAAGTG CTGCAATGAT ACCGCGAGAA CCACGCTCAC CGGCTCAGA TTTATCAGCA
 ATAAACACG CAGCCGGAAG GGCCGAGCGC AGAAGTGGTC CTGCAACTTT ATCCGCCTCC 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_001031680](#), [NM_001320672](#), [NM_004350](#)

UniProt ID:

[Q13761](#)

Synonyms:

AML2; CBFA3; PEBP2aC

Summary:

This gene encodes a member of the runt domain-containing family of transcription factors. A heterodimer of this protein and a beta subunit forms a complex that binds to the core DNA sequence 5'-PYGPYGGT-3' found in a number of enhancers and promoters, and can either activate or suppress transcription. It also interacts with other transcription factors. It functions as a tumor suppressor, and the gene is frequently deleted or transcriptionally silenced in cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

Product images:

