

## Product datasheet for **KN301413RB**

### Apobec3 Mouse Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control
Donor DNA:	RFP-BSD
Symbol:	Apobec3
Locus ID:	80287
Components:	<p><b>KN301413G1</b>, Apobec3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCAAATGCTATTCACCGATC</p> <p><b>KN301413G2</b>, Apobec3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGTGAAAATTTTGAGGAGC</p> <p><b>KN301413RBD</b>, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.</p> <p>Homologous arm and RFP-BSD sequences: pUC vector backbone in gray; <b>Left arm sequence in blue</b>; <b>RFP-BSD in green</b>; <b>Right arm in violet</b></p> <pre> AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC AGAAGTAAGT TGGCCGCAGT 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 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 GCAAAAATCCC 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 AGCGGTACG CTGCGGTAA 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 CTTTCACAGG CTGTCGCCGT GCTCATTTGA </pre>



TAACTGCCG TTATTCATG GACACTGGCT GATTCGGAGC CATCAATGAT CCATTTTTGT GCTCCCCGTT  
 GATCTCAGTC TAGCTCCACA CTTGGGGCAG TTGGGAAATT AGAGGTGAAG GGTGCCAAAA TCCAAGCCAC  
 AATTAGAAAT GCGAAGCCAG GCTGTCCCCT CCCCTCCTAA GCCGAAGGGA GAAAATGTAA GGGTCCCCAC  
 TCCTTAACAC CTACAGAGTC AAACCTTGG TTCAACTGGC AGCTTTGGCT GCAAGCTCGG CACAGGATGG  
 TCTAGGCAGG TTGGATGGAG ACGCCTGGGG CCACCCTTGG GCGCTCTGTC CTACCCTCAC CGCGGTCCGG  
 ATCAGCTTCT CTCTACCATC AGTTAGTTTC CCTTTCTCTT TCGATCCTCC GCGGGCCGCT GTACAGAGGA  
 GCAGGCTCTC GCCAAGCCAA GGGACAAAGA GTTGGGCAGG AGCCTTCTGG GCTTGTATCGC CTAGAGCCCT  
 CCCATTCCGG GAGCTGATGC AGGAAGAAGG TGGGGCCTGC ATTCACCTGG CCCGGGAGGT CAGTTTCACT  
 TCTGGGGGTC TTCCATAGCC TGCTCACAGA AAATGCAACC CCAGCGCCTG GGGCCCAGAG CTGGGAGGGT  
 CCTTGTCTG AGCCGCTTCG GTTACCTTAT AGCTGCTTCT AAAGTGGCCA CCCTGTACCC CTCTCCACGT  
 CACCCATATT TCTTCTGTT GAGACTTCTC AGTCTGGGGT TACTCGCCTT TGGGTCTTCA TGCTGATCCA  
 GGGCTAGGCT GGTCTGGGCT TCAAATTTTA AAGAGAAATC CATGGAAGCA GACTTTGGAC GACCATGTAT  
 GGAGAAGTTT CGATAGATGT CCTAGAATAT CCGTGTCTGT TTAACCCAAC CTCAGGGGAT ACTGGGAGAA  
 GAGGGGACCA CTCTCTAAGG CAATGTGAAC CACCTTTCCA GAAGTAGCCA CTCTGAGCTG GAAAGGGGAA  
 AGGGTAAAGA GAAATTCCTC TAACACACCC ATTGCCTGGA TGCTTGTGGA GACTTCTCGG AACACACCA  
 GTCAGCTAAG AGAAAAAGAG AAATAATAGG GGGCGGGGTT GGCACCTGGAG AGAGATGGCT CAGCAGTTAA  
 GAACCTTTGT CACCTTCCAC AGAGGACCAA CTGCTACCAG CAAACACATG GTATGGCTCA CAACCCCTA  
 TAACTACAGC TTCTGGGAAT CCAAGGCCTT CTCCTTCACT CTCGCCGTT GGAATTTAGA TCAGAAGGGA  
 TCTTGCTGCC GCCCGAAAGA GGAAGGGCTG GAAGAGGAAG GAGCTTGGCG TAATCATGGT CATAGCTGTT  
 TCCTGTGTGA AATTGTTATC CGCTCACAA TCCACACAAC ATACGAGCCG GAAGCATAAA GTGTAAAGCC  
 TGGGGTGCCCT AATGAGTGAG CTAACTCACA TTAATTGCGT TGCGCTACT GCCCGCTTTC CAGTCGGGAA  
 ACCTGTCTGT CCAGCTGCAT TAATGAATCG GCCAACGCGC GGGGAGAGGC GGTTCGCTA TTGGGCGCTC  
 TTCCGCTTCC TCGCTCACTG ACTCGCTGCG CTCGGTCTGT CGGCTGCGGC GAGCGTATC AGCTCACTCA  
 AAGGCGGTAA TACGGTTATC CACAGAATCA GGGGATAACG CAGGAAAGAA CATGTGAGCA AAAGGCCAGC  
 AAAAGGCCAG GAACCGTAAA AAGGCCGCGT TGCTGGCGTT TTTCCATAGG CTCCGCCCC CTGACGAGCA  
 TCACAAAAAT CGACGCTCAA GTCAGAGGTG GCGAAACCCG ACAGGACTAT AAAGATACCA GGCGTTTCCC  
 CCTGGAAGCT CCCTCGTGCG CTCTCCTGTT CCGACCCTGC CGCTTACCGG ATACCTGTCC GCCTTCTCC  
 CTTGCGGAAG CGTGGCGCTT TCTCATAGCT CACGCTGTAG GTATCTCAGT TCGGTGTAGG TCGTTCGCTC  
 CAAGCTGGGC TGTGTGCACG AACCCCGCT TCAGCCCGAC CGCTGCGCCT TATCCGTAA CTATCGTCTT  
 GAGTCCAACC CGGTAAGACA CGACTTATCG CCACTGGCAG CAGCCACTGG TAACAGGATT AGCAGAGCGA  
 GGTATGTAGG CGGTGCTACA GAGTCTTGA AGTGGTGGCC TAACTACGGC TACACTAGAA GAACAGTATT  
 TGGTATCTGC GCTCTGCTGA AGCCAGTTAC CTTCGAAAA AGAGTTGGTA GCTCTTGATC CGGCAACAA  
 ACCACCGCTG GTAGCGGTGG TTTTTTTGTT TGCAAGCAGC AGATTACGCG CAGAAAAAAA GGATCTCAAG  
 AAGATCCTTT GATCTTTTCT ACGGGGTCTG ACCTCAGTG GAACGAAAAC TCACGTAAAG GGATTTTGGT  
 CATGAGATTA TCAAAAAGGA TCTTACCTA GATCCTTTTA AATTAATAAT GAAGTTTAA ATCAATCTAA  
 AGTATATATG AGTAAACTTG GTCTGACAGT TACCAATGCT TAATCAGTGA GGCACCTATC TCAGCGATCT  
 GTCTATTTTC TTCATCCATA GTTGCCTGAC TCCCGCTCGT GTAGATAACT ACGATACGGG AGGGCTTACC  
 ATCTGGCCCC AGTGCTGCAA TGATACCGCG AGAACACGC TCACCGGCTC CAGATTTATC AGCAATAAAC  
 CAGCCAGCCG GAAGGGCCGA GCGCAGAAGT GGTCTGCAA CTTTATCCGC CTCCATCCAG TCTATTAATT  
 GTTGCCGGGA AGCTAGAGTA AGTAGTTCGC CAGTTAATAG TTTGCGCAAC GTTGTGCCA TTGCTACAGG  
 CATCGTGTG TCACGCTCGT CGTTTGTGAT GGCTTATTC AGCTCCGTT CCCAACGATC

**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\\_001160415](#), [NM\\_001347041](#), [NM\\_030255](#)

**UniProt ID:**

[Q99J72](#)

**Synonyms:** Apobec; Arp3; BC003314; Cem15; Rfv3

**Summary:** DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase-dependent and -independent mechanisms. Selectively targets single-stranded DNA and does not deaminate double-stranded DNA or single-or double-stranded RNA. Exhibits antiviral activity against HIV-1, simian immunodeficiency viruses (SIVs), mouse mammary tumor virus (MMTV) and friend murine leukemia virus (FrMLV) and may inhibit the mobility of LTR retrotransposons. [UniProtKB/Swiss-Prot Function]

**Product images:**

