

Product datasheet for **KN220612**

BRD2 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:	BRD2
Locus ID:	6046
Components:	<p>KN220612G1, BRD2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCGGAAACGTACTTATTGTG</p> <p>KN220612G2, BRD2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAACATCCCCTTCCCACACG</p> <p>KN220612D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

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 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 AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCACG GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCAGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGCGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAAGCGGAT 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 AACCCCTAAG 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 TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAGG CTGTCGCCGT GCTCATTTGA

```



[View online »](#)

TAACTGCCG TTATTCATGC GACACCTCCA TCCGCTTGA AATGGCCTTC GTCCCGCCT ATGACTGGTC
 CCAGCGGGCA GTACAGACCC CCTAGAAGCC CCTGGAGCTC CCCTTTTTTCG GGCCCGGCC AATCCTCGGA
 GTCTGTCCAC CCCCTCTACT CCGCCCTCAA GAGGATTCA AAGATGGAGG CGGCGGCTCC CTA AACCACT
 TTTCTGTTC ATCCGCCTCC ATCCGAGATC GAAACGGGAC CTCGTGCGCC CCGTAGGGG CCGACAAGAA
 GAGGGAATCC CTGCAGACCA ACAGCGGGCT ATATTGACGA CGGTGTCTGA GATCGGGGAC CGTCTTTTGA
 AGAGTCAGTC CCTCCTTAGT TGCCCGCTC AGCTGAGGCC GCCGCCATTT TCTTGTGTC CGCCGCTGTC
 AGAGCGCGCC AAGCTGCCCG GAGCTCTCCG AGAGGCCCCA AAGAGACTGC TTTCTGTGTC GCCAGGCAGG
 GGGTTTGTG CCTGGAGGCC CAAGAGGAAC GGCTCCCCC CAACTTAGCG GGTATGCTG GACCGGGCGG
 TGAGGGGAAC CGAGGCCACC CGGACTTTCC GCGGCTGAGG GCAGCGCCGG TTCCTTGC GG TCAAG AAGGC
 GAGTTACATG ATCCCCATG TTGTGCAAAA AAGCGGTTAG CTCCTTCGGT CCTCCGATCG TTGTGAGAAG
 TAAGTTGGCC GCAGTGTAT CACTCATGGT TATGGCAGCA CTGCATAATT CTCTTACTGT CATGCCATCC
 GTAAGATGCT TTTCTGTGAC TGGTGAGTAC TCAACCAAGT CATTCTGAGA ATAGTGTATG CGGCGACCGA
 GTTGTCTTG CCCGGCGTCA ATACGGGATA ATACCGCGCC ACATAGCAGA ACTTTAAAAG TGCTCATCAT
 TGGAAAACGT TCTTCGGGGC GAAAACCTCTC AAGGATCTTA CCGCTGTTGA GATCCAGTTC GATGTAACCC
 ACTCGTGAC CCAACTGATC TTCAGCATCT TTTACTTTCA CCAGCGTTTC TGGGTGAGCA AAAACAGGAA
 GGCAAAATGC CGCAAAAAG GGAATAAGGG CGACACGGAA ATGTTGAATA CTCATACTCT TCCTTTTTCA
 ATATTATTGA AGCATTATC AGGGTTATTG TCTCATGAGC GGATACATAT TTGAATGTAT TTAGAAAAAT
 AAACAAATAG GGGTTCCGCG CACATTTCCC CGAAAAGTGC CACCTGACGT CTAAGAAACC ATTATTATCA
 TGACATTAAC CTATAAAAAT AGGCGTATCA CGAGGCCCTT TCGGGTCGCG CGTTTCGGTG ATGACGGTGA
 AAACCTCTGA CACATGCAGC TCCCGTTGAC GGTACACAGT TGTCTGTAAG CGGATGCCGG GAGCAGACAA
 GCCCGTCAGG GCGCGTCAGC GGGTGTGGC GGGTGTGCGG GCTGGCTTAA CTATGCGGCA TCAGAGCAGA
 TTGACTGAG AGTGCACCAT AAAATTGTAA ACGTTAATAT TTTGTTAAA TTCGCGTTAA ATTTTTGTTA
 AATCAGCTCA TTTTTAAC AATAGGCCGA AATCGGCAAA ATCCCTATA AATCAAAAAG ATAGCCCGAG
 ATAGGGTTGA GTGTTGTTCC AGTTTGAAC AAGAGTCCAC TATTAAGAA CGTGGACTCC AACGTCAAAG
 GCGAAAAAC CGTCTATCAG GCGATGCGC CACTACGTGA ACCATCACCC AAATCAAGTT TTTTGGGGTC
 GAGGTGCCGT AAAGCACTAA ATCGGAACCC TAAAGGGAGC CCCCATTTA GAGCTTGACG GGGAAAGCCG
 GCGAACGTGG CGAGAAAGGA AGGGAAGAAA GCGAAAGGAG CGGGCGCTAG GCGCTGGCA AGTGTAGCGG
 TCACGCTGCG CGTAACCACC ACACCCGCG CGCTTAATGC GCCGCTACAG GCGCGTACT ATGGTTGCTT
 TGACGTATGC GGTGTGAAAT ACCGCACAGA TCGTAAGGA GAAAATACCG CATCAGGCGC CATTGCCAT
 TCAGGCTGCG CAACTGTTGG GAAGGGCGAT CGGTGCGGGC CTCTTCGCTA TTACGCCAGC TGGCGAAAGG
 GGGATGTGCT GCAAGGCGAT TAAGTTGGGT AACGCCAGG TTTTCCAGT CACGACGTTG TAAAACGACG
 GCCAGTGAAT TGAGGCTAC AGTCAGTGGG GAGGACTTTC ACAGGCTGTC GCCGTGCTCA TTTGATAACT
 GCCGTTATT CATGCGACAC GGGGTGTGGG GCGCCGTGTT GGGAGTACTG AGCGGCCCG GCGCGCTGCT
 GTTGCGGCGC AGCTGTCGAC TCGGTGCGCG GGAGGGAATT GAGCGACGGT TTTGGAACGG TGGTGGCGGC
 TCGGCTACTG CTCGTGGAGG GGAATACAGG TTGTCAATTT ATACGCTATT AATGCCCGC TGGCCAGTC
 TTAACCGAGT CAGGCAGAGC TAGTTTGACG GTGGAGTGA GTGAGGTTGA ACAGCAGGT TGGCGTTTGG
 TGGTCTGGT ATCTAGCGGC GGTCTGTTAG CCTTTTAGG GGGATTCACG GACACCTCTA GCGCCCTGTA
 GGGTTGCCAT GGTGACGGAG CGCTAAGGG ACTGGCAACG GGGATTCCA GAGAAGGTA AAGGGATCAC
 TCTCCCGTGT GTGCAGGTT CTAATGCCA GGGTATGTC TTAATCTTT TGCTTCTTT GGGTGGGTGG
 GTTGTGTGTG GTGTTTGTG GTGCAGGGAT TGTTTTTCC TAACATTAAG AGTTTGATTG AGGGCAGGAG
 GGTAGAGCTA AGGTTCCCTAG TTCAGCTCTG CGATGTAAC AATGAGATTC CCATATGATG TCACTCTCGC
 CGGTTGGACT TTAGATCAGA AGGGATCTTG CTGCCGCCG AAAGAGGAAG GGCTGGAAGA GGAAGGAGCT
 TGGCGTAATC ATGGTCATAG CTGTTTCTG TGTGAAATTG TTATCCGCTC ACAATTCCAC ACAACATACG
 AGCCGGAAGC ATAAAGTGTA AAGCCTGGGG TGCCTAATGA GTGAGCTAAC TCACATTAAT TGCGTTGCGC
 TCACTGCCG CTTTCCAGTC GGGAAACCTG TCGTGCCAGC TGCATTAATG AATCGGCCAA CGCGCGGGGA
 GAGCGGTTT GCGTATTGGG CGCTCTTCCG CTCTCTCGCT CACTGACTCG CTGCGCTCGG TCGTTCCGCT
 GCGCGAGCG GTATCAGCTC ACTCAAAGGC GGTAAATACGG TTATCCACAG AATCAGGGGA TAACGCAGGA
 AAGAACATGT GAGCAAAAAG CCAGCAAAAG GCCAGGAACC GTAAAAAGGC CGCGTTGCTG GCGTTTTTCC
 ATAGGCTCCG CCCCCTGAC GAGCATCACA AAAATCGACG CTCAAGTCAG AGGTGGCGAA ACCCGACAGG
 ACTATAAAGA TACCAGGCGT TCCCCCTGG AAGCTCCCTC GTGCGCTCTC CTGTTCCGAC CCTGCCGCTT
 ACCGGATACC TGTCCGCTT TCTCCCTCG GGAAGCGTGG CGCTTTCTCA TAGCTCACGC TGTAGGTATC
 TCAGTTCCGT GTAGGTCGTT CGCTCAAAGC TGGGCTGTG GCACGAACCC CCCGTTACG CCGACCGCTG

```

CGCCTTATCC GGTAACATC GTCTTGAGTC CAACCCGGTA AGACACGACT TATCGCCACT GGCAGCAGCC
ACTGGTAACA GGATTAGCAG AGCGAGGTAT GTAGGCGGTG CTACAGAGTT CTTGAAGTGG TGGCCTAACT
ACGGCTACAC TAGAAGAACA GTATTTGGTA TCTGCGCTCT GCTGAAGCCA GTTACCTTCG GAAAAAGAGT
TGGTAGCTCT TGATCCGGCA AACAAACCAC CGCTGGTAGC GGTGGTTTTT TTGTTTGCAA GCAGCAGATT
ACGCGCAGAA AAAAAGGATC TCAAGAAGAT CCTTTGATCT TTTCTACGGG GTCTGACGCT CAGTGGAACG
AAAATCACG TTAAGGGATT TTGGTCATGA GATTATCAA AAGGATCTTC ACCTAGATCC TTTTAAATTA
AAAATGAAGT TTTAAATCAA TCTAAAGTAT ATATGAGTAA ACTTGGTCTG ACAGTTACCA ATGCTTAATC
AGTGAGGCAC CTATCTCAGC GATCTGTCTA TTTCGTTTCCAT CCATAGTTGC CTGACTCCCC GTCGTGTAGA
TAACTACGAT ACGGGAGGGC TTACCATCTG GCCCCAGTGC TGCAATGATA CCGCGAGAAC CACGCTCACC
GGTCCAGAT TTATCAGCAA TAAACCAGCC AGCCGGAAGG GCCGAGCGCA GAAGTGGTCC TGCAACTTTA
TCCGCCTCCA TCCAGTCTAT TAATTGTTGC CGGGAAGCTA GAGTAAGTAG TTCGCCAGTT AATAGTTTGC
GCAACGTTGT TGCCATTGCT ACAGGCATCG TGGTGTACAG CTCGTCGTTT GGTATGGCTT CATTACAGCTC
CGTTTCCCAA CGATC

```

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_001113182](#), [NM_001199455](#), [NM_001199456](#), [NM_001291986](#), [NM_005104](#), [NR_037625](#)

UniProt ID:

[P25440](#)

Synonyms:

D6S113E; FSH; FSRG1; NAT; RING3; RNF3

Summary:

This gene encodes a transcriptional regulator that belongs to the BET (bromodomains and extra terminal domain) family of proteins. This protein associates with transcription complexes and with acetylated chromatin during mitosis, and it selectively binds to the acetylated lysine-12 residue of histone H4 via its two bromodomains. The gene maps to the major histocompatibility complex (MHC) class II region on chromosome 6p21.3, but sequence comparison suggests that the protein is not involved in the immune response. This gene has been implicated in juvenile myoclonic epilepsy, a common form of epilepsy that becomes apparent in adolescence. Multiple alternatively spliced variants have been described for this gene. [provided by RefSeq, Dec 2010]

Product images:

