

## Product datasheet for **KN209840**

### p57 Kip2 (CDKN1C) 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:	p57 Kip2
Locus ID:	1028
Components:	<p><b>KN209840G1</b>, p57 Kip2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCGACAAGACGCTCCATCG</p> <p><b>KN209840G2</b>, p57 Kip2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGCTGGTGCGCACTAGTACT</p> <p><b>KN209840D</b>, 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**

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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
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AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
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GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAAGCGAT GCCGGGAGCA
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GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
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GGCCGGCCCG CGCCCCGCGT CCACAGTCTT GACTGACTGA CTGAAAAGAG GAAGGGCTGG AAGAGGAAGG
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GCGCTCACTG CCCGCTTTCC AGTCGGGAAA CCTGTCTGTC CAGCTGCATT AATGAATCGG CCAACGCGCG
GGGAGAGGCG GTTTGCGTAT TGGGCGCTCT TCCGCTTCCT CGCTCACTGA CTCGCTGCGC TCGGTCTGTT
GGCTGCGGCG AGCGGTATCA GCTCACTCAA AGGCGGTAAT ACGGTTATCC ACAGAATCAG GGGATAACGC
AGGAAAAGAAC ATGTGAGCAA AAGGCCAGCA AAAGGCCAGG AACCGTAAAA AGGCCGCGTT GCTGGCGTTT
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CAGGACTATA AAGATACCAG GCGTTTCCCC CTGGAAGCTC CCTCGTGCGC TCTCCTGTTT CGACCCTGCC
GCTTACCGGA TACCTGTCCG CCTTTCTCCC TTCGGGAAGC GTGGCGCTTT CTCATAGCTC ACGCTGTAGG
TATCTCAGTT CGGTGTAGGT CGTTCGCTCC AAGCTGGGCT GTGTGCACGA ACCCCCCGTT CAGCCCGACC
GCTGCGCCTT ATCCGGTAAC TATCGTCTG AGTCCAACCC GGTAAGACAC GACTTATCGC CACTGGCAGC
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TAGATAACTA CGATACGGGA GGGCTTACCA TCTGGCCCA GTGCTGCAAT GATACCGCGA GAACCACGCT
CACCGGCTCC AGATTTATCA GCAATAAAC AGCCAGCCGG AAGGGCCGAG CGCAGAAGTG GTCCTGCAAC
TTTATCCGCC TCCATCCAGT CTATTAATTG TTGCCGGGAA GCTAGAGTAA GTAGTTCGCC AGTTAATAGT
TTGCGCAACG TTGTTGCCAT TGCTACAGGC ATCGTGGTGT CACGCTCGTC GTTTGGTATG GCTTCATTCA
GCTCCGGTTC CCAACGATC
    
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**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\\_000076](#), [NM\\_001122630](#), [NM\\_001122631](#), [NM\\_001362474](#), [NM\\_001362475](#)

**UniProt ID:**

[P49918](#)

**Synonyms:**

BWCR; BWS; KIP2; p57; p57Kip2; WBS

**Summary:**

This gene is imprinted, with preferential expression of the maternal allele. The encoded protein is a tight-binding, strong inhibitor of several G1 cyclin/Cdk complexes and a negative regulator of cell proliferation. Mutations in this gene are implicated in sporadic cancers and Beckwith-Wiedemann syndrome, suggesting that this gene is a tumor suppressor candidate. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Oct 2010]

Product images:

