

## Product datasheet for **KN203500RB**

### IRF1 Human 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:	IRF1
Locus ID:	3659
Components:	<p><b>KN203500G1</b>, IRF1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTAATTCCAACCAAATCCCG</p> <p><b>KN203500G2</b>, IRF1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AAGTACATGGGTAAAAACAG</p> <p><b>KN203500RBD</b>, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.</p>

Homologous arm and RFP-BSD sequences:

pUC vector backbone in gray; Left arm sequence in blue; RFP-BSD in green; Right arm in violet

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TACGGAGACT GCGGGAAGAG GCGCCACAGG TGTTCTTGG GCCACTTCTC CAGAGGAGGG GAAACCGGGC
CGGAAGGGTT AGCGTCTTGG TCTTAGCGTT GTGGGCGCTG TGGCTGTCAG GAAGGCGTAG AATGGATTCA
GGGGGGCGGG AGGGGGCTGT TCAGGGTGAC GGCTAGCCCT TTGCTAGCTA GTGGTTACAA CTCAAGTCAA
GGGAATTTCT TCTTGGCATC AAGCAAAAGA AGTCCCTCCC TTCCCAAAGG ATTTGAATTT TGAGCGAAAA
GTTCTGAAAT TAGGGTATCT GTGCATTTTG TCTCTTTTCC TGCATATGAA TCCTGAAGCC ATCACTTGCA
TGCTGTCTC CTCCAGAGAC TGGCTGGGAG GGGCTGAAGG AAGGGGCAAA AGCATTTTTG CCTAAGATGC
TGAAAAAATT TGGAGAGCAG TTTTATTCCA GCGCAGCTCC CCTCCGCACT GAGTGTAGTA CCTAGCAGCT
GGCTGAGGTG AGGGGAGGGT AACTAAGTGA CCTCGGGTGG GGCAGGTCAC TGCCAGGTA CTGTTCAACA
GATTCCAGAC TGGAGCCTCT GTGTTCTCTT TACAGCCAAC GATGCAGCTC AAAAAGGGAA GTGATAACGG
GACAAGCAGG TGTTTCTCCC AGTGGGTCCT GCATGCAGGG AGTGTGCACG GCCCAGCCTG GGCCTCACTT
GCATGACTCC TGCCTTCTC CTTCTTGAG GTAGGGCACC CACCTGAAGG CACTTCCAGT TTCCAGCAGC
AAGACTTTCC AGCATCTGCA GAGCTGGAGT TCTGCTCTCC TCTAAGCGAG ACCCTTACAA ACATACACAG
CACTCTGCAG GGCTCCAATC GAACAAATAG AAGACTGAGA AGTGGATGCT GCTGGGCAGA AACGTGCCTG
GCTTAGCAGA GGACAAACGA GTTAATCTTG CACCAGTCAC TCTGGCCCAA GAAGCCTATA GCTGGTGAC
TTGGGGCAAC ATAGACCCTA TAGACTTAGT AGCAATGATA GTATTCATAA TAATAGCTAA TGCTTACTGA
ACACTCCCTG TGTGCCTGGC ACCTGCTAAG TATGTTATTT ACATTGTGTC ATTTAATCCT CGCAGTAGTC
CTGTGGGTTA GATCTTACTA ATGTCATCAT TTTCAGATA GTAACAGAG GCACTGAGAG GTAGATCATA
AGATCACACA
```

**GE100003**, scramble sequence in pCas-Guide vector



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**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\\_002198](#), [NM\\_001354924](#), [NM\\_001354925](#), [NR\\_149068](#), [NR\\_149069](#)

**UniProt ID:** [P10914](#)

**Synonyms:** IRF-1; MAR

**Summary:** The protein encoded by this gene is a transcriptional regulator and tumor suppressor, serving as an activator of genes involved in both innate and acquired immune responses. The encoded protein activates the transcription of genes involved in the body's response to viruses and bacteria, playing a role in cell proliferation, apoptosis, the immune response, and DNA damage response. This protein represses the transcription of several other genes. As a tumor suppressor, it both suppresses tumor cell growth and stimulates an immune response against tumor cells. Defects in this gene have been associated with gastric cancer, myelogenous leukemia, and lung cancer. [provided by RefSeq, Aug 2017]

## Product images:

