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Product datasheet for KN204140

Nrf2 (NFE2L2) 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: Nrf2

Locus ID: 4780

Components: **KN204140G1**, Nrf2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCCGTCCCGGCACCACCGCA
KN204140G2, Nrf2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGGGACGGGAGTCCCGGCGG
KN204140D, 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

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CGGGCGGTAA AGTGAGATAA AAGCAGGGCA AGGTTCTGCA ACTCCAAATC AGGGAGGCGC AGCTCCTACA
CCAACGCCTT TCCGGGGCTC CGGGTGTGTT TGTTCCAACT GTTTAAACTG TTTCAAAGCG TCCGAACTCC
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GTCCCTTCCC GCCCCCGGAC CGCGAGCTTC TTGCGTCAGC CCCGGCGCGG GTGGGGGATT TTCGGAAGCT
CAGCCCGCGC GGCCGGCGGG GGAAGGAAGG GCCCGGACTC TTGCCCCGCC CTTGTGGGGC GGGAGGCGGA
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GCAAGGGTCT GGGCAGCGCC GTCGTGCTCC CCGGAGTGGA GGCGGCCGAG CGCGCCGGGG TGCCCGCCTT
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CGCGCCCCAA GACCTCCTTG AGTGCGGGCT GCGACGCGCT CACCCCGCTG GGCCGTCTGT GGGCGCGGCT
TTGCGAAGTC ATCCATCTCT CGGATCACTC TCTGGCAGCC TTGAGCTCTC TTGAAAGCCC AGCCCCGGGA
CGAGGGAGGA GCGCCT

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.

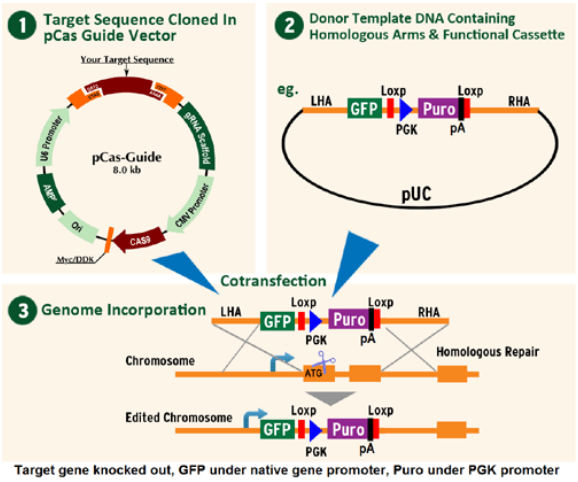
RefSeq: NM_001145412, NM_001145413, NM_001313900, NM_001313901, NM_001313902, NM_001313903, NM_001313904, NM_006164

UniProt ID: Q16236

Synonyms: NRF2

Summary: This gene encodes a transcription factor which is a member of a small family of basic leucine zipper (bZIP) proteins. The encoded transcription factor regulates genes which contain antioxidant response elements (ARE) in their promoters; many of these genes encode proteins involved in response to injury and inflammation which includes the production of free radicals. Multiple transcript variants encoding different isoforms have been characterized for this gene. [provided by RefSeq, Sep 2015]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter