

Product datasheet for **KN211665**

KSR2 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:	KSR2
Locus ID:	283455
Components:	KN211665G1 , KSR2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCGTTGGAGGTAGCACATT KN211665G2 , KSR2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ACAAAAAGAAATCCGGACCC KN211665D , 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**

```

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 GGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCACAG GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAACA AATAGGGGTT CCGCGCAT TCCCGGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGTC TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG GAGACGGTCA CAGCTTGCT GTAAGCGGAT 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
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 CGCTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAGG CTGTCGCCGT GCTCATTTGA

```



[View online »](#)

TAACTGCCCG TTATTCATGC GACACAAGTG TACAGACAGC ATCACATCAC CTGGTTTGCT TCTGAGAAAC
 AGCATCTCTC CTTTTCAGGG ACCAGAGACT CAGAGAGAGA GGAGACATTC TAATGGAGTC CGTTTGATAT
 CCCAAAATAA AATAATAAAT TTTGGCTCTT GTCCCCTCCT CCCACTCCCA CCCCTCAAC CCTGTGTGAG
 ATGTTGGATT TCTTCTCAT GAGACATTGT TGAGAAGTCG CAGTGGTTGG AGAGGCGGAG GGTAGACTAC
 CTCTACTCCC CCCCTCTTT TTTCTCTCTG GGAGGAGGAG GAGGGGAAGG GGGTTGCAGA GCAAGCGATG
 GATGAGGAAA ACATGACGAA AAGCGAGGAG CAGCAGCCTC TGAGTTTGCA AAAAGCCTTA CAGCAGTGCC
 AACTGGTCCA AAACACTAGC ATGGAGAGCG ACGAGAGCGG CCTGCCC GCC ATGGAGATCG AGTGCCGCAT
 CACCGGCACC CTGAACGGCG TGGAGTTCTGA GCTGGTGGGC GCGGAGAGG GCACCCCGA GCAGGGCCGC
 ATGACCAACA AGATGAAGAG CACCAAAGGC GCCCTGACCT TCAGCCCTA CCTGCTGAGC CACGTGATGG
 GCTACGGCTT CTACCACTT GGCACCTACC CCAGCGCTA CGAGAACCCC TTCCTGCACG CCATCAACAA
 CGGCGGCTAC ACCAACACCC GCATCGAGAA GTACGAGGAC GCGGCGTGC TGCACGTGAG CTTAGCTAC
 CGTACGAGG CCGGCCGCT GATCGGCGAC TTCAAGGTGA TGGCACCCG CTTCCCGAG GACAGCGTGA
 TCTTACCGA CAAGATCATC CGCAGCAACG CCACCTGGA GCACCTGCAC CCCATGGCG ATAACGATCT
 GGATGGCAGC TTCACCCGCA CCTTCAGCCT GCGCGACGGC GGCTACTACA GCTCCGTGGT GGACAGCCAC
 ATGCACTTCA AGAGCGCCAT CCACCCAGC ATCCTGCAGA ACGGGGGCCC CATGTTCCG TCCGCGCGG
 TGGAGGAGGA TCACAGCAAC ACCGAGCTGG GCATCGTGA GTACCAGCAC GCCTTCAAGA CCCCGGATGC
 AGATGCCGGT GAAGAAAGAG TTTAAGAATT CCGATCATAT TCAATAACCC TTAATAAATC TTCGTATAAT
 GTATGCTATA CGAAGTTATT AGGTCTGAAG AGGAGTTTAC GTCCAGCCAA GCTTAGGATC TCGACCTCGA
 AATTCTACCG GGTAGGGGAG GCGCTTTTCC CAAGGCAGTC TGGAGCATGC GCTTTAGCAG CCCCGTGGC
 ACTTGGCGCT ACACAAGTGG CCTCTGGCCT CGCACACATT CCACATCCAC CGGTAGCGCC AACCGGCTCC
 GTTCTTTGGT GGCCCTTCG CGCCACCTT TACTCCTCC CTAGTCAGGA AGTTCCTCC CGCCCCGAG
 CTCGCGTCGT GCAGGACGTG ACAAATGGAA GTAGCAGTC TCACTAGTCT CGTGCAGATG GACAGCACCG
 CTGAGCAATG GAAGCGGTA GGCCTTTGG GCAGCGGCA ATAGCAGCTT TGCTCCTTCG CTTTCTGGC
 TCAGCAGCTG GGAAGGGTG GTCCGGGGC GGGCTCAGGG GCGGGCTCAG GGGCGGGCG GCGCCCGAA
 GGTCTCCGG AGGCCCGCA TTCTGCACGC TTCAAAAGCG CACGTCTGCC GCGCTGTTCT CCTCTTCTC
 ATCTCCGGC CTTTCGACCT GCATCCATCT AGATCTCGAG CAGCTGAAGC TTACCATGAC CGAGTACAAG
 CCCACGGTGC GCCTCGCCAC CCGCGACGAC GTCCCCAGG CCGTACGCAC CCTCGCCGC GCGTTCGCCG
 ACTACCCCGC CACGCGCCAC ACCGTCGATC CGGACCGCA CATCGAGCGG GTCACCGAGC TGCAAGAACT
 CTTCTCACG CGCGTCGGC TCGACATCG CAAGGTGTGG GTCGCGGACG ACGGCGCCG GGTGGCGGTC
 TGGACCACG CGGAGAGCGT CGAAGCGGG GCGGTGTTG CCGAGATCG CCCGCGCATG GCCGAGTTGA
 GCGGTTCCG GCTGGCCCG CAGCAACAGA TGAAGGCCT CCTGGCGCC CACCGGCCA AGGAGCCCG
 GTGGTTCCG GCCACCGTC GGTCTCGCC CGACCACAG GGCAAGGGTC TGGGAGCGC CGTCTGCTC
 CCCGAGTGG AGGCGGCCA GCGCGCCGG GTGCCCGCT TCTGGAGAC CTCCGCGCC CACAACCTC
 CCTTCTACGA GCGGCTCGG TACCCGTC CCGCCGACG CGAGGTGCC GAAGGACCG GCACCTGGTG
 CATGACCCGC AAGCCCGGTG CCTGACGCC GCCCACGAC CCGCAGCGC CGACCGAAAG GAGCGCACGA
 CCCCATGCAT CGATGATATC AGATCCCCG GATGCAGAAA TTGATGATCT ATTAACAAT AAAGATGTCC
 ACTAAAATG AAGTTTTTCC TGTCACTT TGTAAAGAG GGTGAGAACA GAGTACCTAC ATTTTGAATG
 GAAGGATTG AGCTACGGG GTGGGGTGG GGTGGGATTA GATAAATGCC TGCTCTTAC TGAAGGCTCT
 TTACTATTG TTTATGATA TGTTCATAG TTGGATATCA TAATTTAAAC AAGCAAAAC AAATTAAGGG
 CCAGCTCATT CCTCCACTC ATGATCTATA GATCTATAGA TCTCTCGTG GATCATTGT TTTCTCTGA
 TTCCACTTT GTGGTTCTAA GACTGTGGT TTCAAATGT GTCAGTTTCA TAGCCTGAAG AACGAGATCA
 GCAGCCTCTG TTCCACATAC ACTTCATTCT CAGTATTGTT TTGCCAAGTT CTAATCCAT CAGAAGCTGG
 TCGAGATCCG GAACCCTTAA TATAACTCG TATAATGTAT GCTATACGAA GTTATTAGT CCCTCGAAGA
 GGTTCCTAG GCGCGCCCT TCTTTCCCC TCCTTTCTC CCACGGTCCC CTTTCCCTCT GATTCTGTTT
 ATTGGGGCT GGGGTGGTG GTGTGGGCA GCAAGGTGG CACGGTTTG TTTTCTGTA TTTCTCTCT
 TGCAAAGCCT GCATTGGATA TCCTTTACT GTGCTGCTG CGTCTGCGC TGGCTGGTG GTGGTAGTAG
 TAGTAGTAAT TGTATTCTT TATTTATTAT TATTGTTGCG GCTGTTACG TTGTCATTCG CTTCTCGCT
 GAGGAGGGAG TTCTCTCTT TTTCCGCTG TGATTTGTT TATATGCCAC GGGGGCTTG GTGCCGGTA
 ATACATTAAG GAGCTGCAGA GAACCCAGT GACCTTGCGC ATTCTGCAGG TGGTCAAAAG GTGGTTTTTG
 CTCACAGAAT GGGGCCGCT GTCAGTGTAG ACCTCTCTT CTCTTGGCT TCTTCCCTC CCTCTTTTG
 CTCCTTAGAT TTTTGTGTTT AAATCAGTGA TATACATGTC AGGAGGCAAG ATGCATGAAA AAAAAATTC
 CTATGGAAC ACCCATTTCC AATCCAATCG TTTTGATGCA GTGAGCTGT GCAGGCCCTA CTCTCGCCGG

```

TTGGACTIONA GATCAGAAGG GATCTTGCTG CCGCCCCAAA GAGGAAGGGC TGAAGAGGA AGGAGCTTGG
CGTAATCATG GTCATAGCTG TTTCTGTGT GAAATTGTTA TCCGCTCACA ATTCCACACA ACATACGAGC
CGGAAGCATA AAGTGTAAG CCTGGGGTGC CTAATGAGTG AGCTAACTCA CATTAAATTGC GTTGCGCTCA
CTGCCCGCTT TCCAGTCGGG AAACCTGTCT TGCCAGCTGC ATTAATGAAT CGGCCAACGC GCGGGGAGAG
GCGGTTTTGCG TATTGGGCGC TCTTCCGCTT CCTCGCTCAC TGACTIONGCTG CGCTCGGTCTG TTCGGCTGCG
GCGAGCGGTA TCAGTCACT CAAAGGCGGT AATACGGTTA TCCACAGAAT CAGGGGATAA CGCAGGAAAG
AACATGTGAG CAAAAGGCCA GCAAAAGGCC AGGAACCGTA AAAAGGCCGC GTTGCTGGCG TTTTCCATA
GGCTCCGCC CCCTGACGAG CATCACAAAA ATCGACGCTC AAGTCAGAGG TGGCGAAACC CGACAGGACT
ATAAAGATAC CAGGCGTTTC CCCCTGGAAG CTCCCTCGTG CGCTCTCTG TTCCGACCCT GCCGCTTACC
GGATACCTGT CCGCCTTTCT CCCTTCGGGA AGCGTGCGC TTTCTCATAG CTCACGCTGT AGGTATCTCA
GTTGCGGTGA GGTGTTTCG TCCAAGCTGG GCTGTGTGA CGAACCCCG GTTCAGCCCG ACCGCTGCGC
CTTATCCGGT AACTATCGTC TTGAGTCAA CCGGTAAGA CACGACTTAT CGCCACTGGC AGCAGCCACT
GGTAACAGGA TTAGCAGAGC GAGGTATGTA GCGGTGTGA CAGAGTTCTT GAAGTGTGG CCTAACTACG
GCTACACTAG AAGGACAGTA TTTGGTATCT GCGCTCTGCT GAAGCCAGTT ACCTTCGGAA AAAGAGTTGG
TAGCTCTTGA TCCGGCAAAC AAACCACCGC TGGTAGCGGT GGTTTTTTTT TTTGCAAGCA GCAGATTACG
CGCAGAAAAA AAGGATCTCA AGAAGATCCT TTGATCTTTT CTACGGGGTC TGACGCTCAG TGAAGGAAA
ACTCACGTTA AGGGATTTTG GTCATGAGAT TATCAAAAAG GATCTTCACC TAGATCCTTT TAAATTAATA
ATGAAGTTTT AAATCAATCT AAAGTATATA TGAGTAACT TGGTCTGACA GTTACCAATG CTTAATCAGT
GAGGCACCTA TCTCAGCGAT CTGTCTATTT CGTTCATCCA TAGTTGCTG ACTCCCCGTC GTGTAGATAA
CTACGATACG GGAGGGCTTA CCATCTGGCC CCAGTGTGTC AATGATACCG CGAGACCCAC GCTCACCGGC
TCCAGATTTA TCAGCAATA ACCAGCCAGC CGGAAGGGCC GAGCGCAGAA GTGGTCTGCT AACTTTATCC
GCCTCCATCC AGTCTATTAA TTGTTGCCGG GAAGCTAGAG TAAGTAGTTC GCCAGTTAAT AGTTTTCGCA
ACGTTGTTGC CATTGCTACA GGCATCGTGG TGTCACGCTC GTCGTTTGGT ATGGCTTCAT TCAGCTCCGG
TTCCCAACGA TC

```

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_173598](#)

UniProt ID:

[Q6VAB6](#)

Synonyms:

FLJ25965

Summary:

Location-regulated scaffold connecting MEK to RAF. Has very low protein kinase activity and can phosphorylate MAP2K1 at several Ser and Thr residues with very low efficiency (in vitro). Interaction with BRAF enhances KSR2-mediated phosphorylation of MAP2K1 (in vitro). Blocks MAP3K8 kinase activity and MAP3K8-mediated signaling. Acts as a negative regulator of MAP3K3-mediated activation of ERK, JNK and NF-kappa-B pathways, inhibiting MAP3K3-mediated interleukin-8 production.[UniProtKB/Swiss-Prot Function]

Product images:

