

Product datasheet for **KN510962**

Ngef Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 linear donor
Donor DNA:	EF1a-GFP-P2A-Puro
Symbol:	Ngef
Locus ID:	53972



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Components:
KN510962G1, Ngef gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN510962G2, Ngef gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN510962D, Linear donor DNA containing LoxP-EF1a-tGFP-P2A-Puro-LoxP:

The sequence below is cassette sequence only. The linear donor DNA also contains proprietary target sequence.

LoxP-EF1a-tGFP-P2A-Puro-LoxP (2739 bp)

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ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA
CATCGCCAC AGTCCCCGAG AAGTTGGGG GAGGGGTCCG CAATTGAACC GGTGCCTAGA GAAGGTGGCG
CGGGGTAAC TGGGAAAGTG ATGTCGTGTA CTGGCTCCG CTTTTCCCG AGGGTGGGG AGAACCCTAT
ATAAGTCAG TAGTCGCCG GAACGTTCT TTTCCGAAC GGTTCGCCG CAGAACACAG GTAAGTGCCG
TGTGTGGTTC CCGCGGGCT GGCCTCTTA CGGGTTATG CCCTTGCGTG CCTTGAATTA CTTCCACCTG
GCTGCAGTAC GTGATTCTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGG AGAGTTCGAG GCCTTGCGCT
TAAGGAGCCC CTTCGCCTG TGCTTGAGT GAGGCCTGG CTGGGCGTG GGGCCCGCG GTGCGAATCT
GGTGGCACCT TCGCGCCTG CTCGCTGCT TCGATAAGT TCTAGCCATT TAAAATTTT GATGACCTGC
TGCAGCGCT TTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAGATC TGCACACTGG TATTTGCGTT
TTTGGGGCCG CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTC GGCAGGCGG GGCCTGCGAG
CGCGGCCACC GAGAATCGGA CGGGGGTAGT CTAAGCTGG CCGGCCTGCT CTGGTGCCTG GCCTCGCGCC
GCCGTGTATC GCCCGCCCT GGGCGGCAAG GCTGGCCCG TCGGCACCAG TTGCGTGAGC GGAAAGATGG
CCGTTCCCG GCCCTGTGC AGGGAGCTCA AAATGGAGGA CGCGGCGCTC GGGAGAGCGG GCGGGTGAAGT
CACCCACACA AAGGAAAAGG GCCTTCCGT CCTCAGCCG CGCTTCATGT GACTCCACGG AGTACCGGGC
GCCGCTCAG CACCTCGATT AGTTCGAGT CTTTGGAGT ACGTCGTCT TAGTTGGGG GGAGGGGTTT
TATGCGATGG AGTTTCCCA CACTGAGTGG GTGAGACTG AAGTTAGGCC AGCTTGGCAG TTGATGTAAT
TCTCCTTGGG ATTTGCCCTT TTTGAGTTG GATCTTGGT CATTCTCAAG CCTCAGACAG TGGTTCAAAG
TTTTTTCTT CCATTTCAAG TGTCGTGAAT GGAGAGCGAC GAGAGCGGCC TGCCCGCCAT GGAGATCGAG
TGCCGCATCA CCGGCACCCT GAACGGCGTG GAGTTCGAGC TGGTGGGCGG CGGAGAGGGC ACCCCGAGC
AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC AGCCCTACC TGCTGAGCCA
CGTGATGGC TACGGCTTCT ACCACTTCG CACCTACCC AGCGGCTACG AGAACCCCTT CCTGCACGCC
ATCAACAACG GCGGCTACAC CAACACCCG ATCGAGAAGT ACGAGGACGG CGGCGTGCTG CACGTGAGCT
TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG GGCACCGGCT TCCCGGAGGA
CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGCGGAT
AACGATCTGG ATGGCAGCTT CACCCGACC TTCAGCCTGC GCGACGGCGG CTACTACAGC TCCGTGGTGG
ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCA TGTTCCCTT
CCGCCCGTG GAGGAGGATC ACAGCAACAC CGAGTGGGG ATCGTGGAGT ACCAGCACGC CTTCAAGACC
CCGGATGCAG ATGCCGGTGA AGAAAGAGGA AGCGGAGCTA CTAACCTCAG CTTGCTGAAG CAGGCTGGAG
ACGTGGAGGA GAACCTGGA CCTATGACCG AGTACAAGC CACGGTGC GCCTGCCACC GCGACGACGT
CCCCAGGGC GTACGCACC TCGCCGCCG GTTCGCCGAC TACCCGCCA CGGCCACAC CGTCGATCCG
GACCGCCACA TCGAGCGGT CACCGAGCTG CAAGAATCT TCCTCACGG CGTCGGGCTC GACATCGGCA
AGGTGTGGT CGCGGACGAC GGCGCCCGG TGGCGGTCTG GACCACGCC GAGAGCGTCG AAGCGGGGGC
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGGGC TGGCCCGCA GCAACAGATG
GAAGGCCTCC TGGCGCCGA CCGGCCAAG GAGCCCGCT GTTCTCTGG CACCCTCGG GTCTCGCCG
ACCACCAGG CAAGGTCTG GGCAGCGCG TCGTGTCCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT
GCCCGCTTC CTGGAGACT CCGCGCCCG CAACCTCCC TTCTACGAG GGCTCGGCT CACCGTCACC
GCCGACGTC AGGTGCCGA AGGACCGCG ACCTGGTGA TGACCCGCA GCCCGGTGCC TGAAACTTGT
TTATTGCAGC TTATAATGGT TACAAATAA GCAATAGCAT CACAAATTC ACAAATAAG CATTTTTTTC
ACTGCATTCT AGTTGTGGT TGTCCAACT CATCAATGA TCTTAATAAC TTCGTATAAT GTATGCTATA CGAAGTTAT
    
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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_001111314](#), [NM_019867](#)

UniProt ID: [Q8CHT1](#)

Synonyms: ephexin; Tims2

Summary: Acts as a guanine nucleotide exchange factor (GEF) which differentially activates the GTPases RHOA, RAC1 and CDC42. Plays a role in axon guidance regulating ephrin-induced growth cone collapse and dendritic spine morphogenesis. Upon activation by ephrin through EPHA4, the GEF activity switches toward RHOA resulting in its activation. Activated RHOA promotes cone retraction at the expense of RAC1- and CDC42-stimulated growth cone extension. [UniProtKB/Swiss-Prot Function]

Product images:

