

Product datasheet for **KN507296**

Gramd1c Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 linear donor
Donor DNA:	EFla-GFP-P2A-Puro
Symbol:	Gramd1c
Locus ID:	207798



Components:

KN507296G1, Gramd1c gRNA vector 1 in pCas-Guide CRISPR vector (GEI00002)

KN507296G2, Gramd1c gRNA vector 2 in pCas-Guide CRISPR vector (GEI00002)

KN507296D, 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)

ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA CATCGCCAC
AGTCCCGCAG AAGTTGGGGG GAGGGGTCCG CAATTGAACC GGTGCCTAGA GAAGGTGGCG CGGGGTAAC TGGGAAAGTG
ATGTCGTGTA CTGGCTCCGC CTTTTTCCCG AGGGTGGGG AGAACCGTAT ATAAGTCAG TAGTCGCCGT GAACGTTCTT
TTTCGCAACG GGTTCGCCG CAGAACACAG GTAAGTGCCG TGTGTGGTTC CCGCGGGCCT GGCTCTTTA CGGGTTATGG
CCCTTGCGTG CCTTGAATTA CTTCCACCTG GCTGCAGTAC GTGATTCTTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGGG
AGAGTTCGAG GCCTTGCGCT TAAGGAGCCC CTTGCGCTCG TGCTTGAGTT GAGGCTGGC CTGGGCGCTG GGGCCGCCG
GTGCGAATCT GGTGGCACCT TCGCGCTGT CTCGCTGCT TCGATAAGTC TCTAGCCATT TAAATTTTTT GATGACCTGC
TGCGACGCTT TTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAGATC TGCACACTGG TATTTCGGTT TTTGGGGCCG
CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTT GGCGAGGCGG GGCTGCGAG CGCGGCCACC GAGAATCGGA
CGGGGTAGT CTCAAGCTGG CCGGCTGCT CTGGTGCCTG GCCTCGCGCC GCCGTGTATC GCGCCGCCCT GGGCGGCAAG
GCTGGCCCGG TCGGCACCAG TTGCGTGAGC GGAAGATGG CCGCTCCCG GCCCTGCTGC AGGGAGCTCA AAATGGAGGA
CGCGGCGCTC GGGAGAGCGG GCGGGTGAGT CACCCACACA AAGGAAAAGG GCCTTTCGT CCTCAGCGCT CGCTTCATGT
GACTCCACGG AGTACCGGGC GCCGTCCAGG CACCTCGATT AGTTCGCGAG CTTTGGAGT ACCTCGCTT TAGGTTGGGG
GGAGGGGTTT TATGCGATGG AGTTTCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGGCAC TTGATGTAAT
TCTCCTGGA ATTTGCCCTT TTTGAGTTG GATCTTGGT CATTCTCAAG CTTGAGACAG TGGTTCAAAG TTTTCTCTT
CCATTTACAG TGTCGTGAAT GGAGAGCGAC GAGAGCGGCG TGCCCGCCAT GGAGATCGAG TGCCGCATCA CCGGCACCTC
GAACGCGCTG GAGTTCGAGC TGGTGGGCGG CGGAGAGGCG ACCCCGAGC AGGGCCGCAT GACCAACAAG ATGAAGAGCA
CCAAAGGCGC CCTGACCTTC AGCCCTACC TGCTGAGCCA CGTGATGGG TACGGCTTCT ACCACTTCGG CACCTACCCC
AGCGGCTACG AGAACCCCTT CCTGCACGCC ATCAACAACG GCGGCTACAC CAACACCCG ATCGAGAAGT ACGAGGACGG
CGGCGTGCTG CACGTGAGCT TCAGCTACCG CTACGAGGCC GGCGCGGTGA TCGCGCACTT CAAGGTGATG GGCACCGGCT
TCCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT
AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG CTAACAGC TCCGTGGTGG ACAGCCACAT
GCATTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCCA TGTTGCGCTT CCGCCGCGTG GAGGAGGATC
ACAGCAACAC CGAGCTGGG ATCGTGAGT ACCAGCACGC CTTCAAGACC CCGGATGAG ATGCCGGTGA AGAAAGAGGA
AGCGGAGCTA CTAACCTCAG CCTGCTGAAG CAGGCTGGAG ACGTGGAGGA GAACCTGGA CCTATGACCG AGTACAAGCC
CACGGTGCGC CTCGCCACCC GCGACGAGT CCCCAGGGCC GTACGCACCC TCGCCGCGC GTTCGCCGAC TACCCGCCA
CGCGCCACAC CGTCGATCCG GACCGCCACA TCGAGCGGT CACCGAGCTG CAAGAACTCT TCCTCACGCG CGTCGGGCTC
GACATCGGCA AGGTGTGGT CGCGGACGAC GCGCGCGCGG TGCGGTCTG GACCACGCCG GAGAGCGTCG AAGCGGGGGC
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGCCG TGCGCGCGCA GCAACAGATG GAAGGCCTCC
TGGCGCCGCA CCGGCCAAG GAGCCCGCT GGTTCCTGCG CACCGTCGGC GTCTCGCCCG ACCACAGGG CAAGGGTCTG
GGCAGCGCCG TCGTGCTCCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT GCCCGCCTTC CTGGAGACCT CCGCGCCCCG
CAACCTCCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC GCGGACGTCG AGGTGCCCGA AGGACCGCGC ACCTGGTGCA
TGACCCGCAA GCCCGGTGCC TGAAACTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTC
ACAAATAAAG CATTTTTTTC ACTGCATTCT AGTTGTGGTT TGTCCAACT CATCAATGTA TCTTAATAAC TTCGTATAAT
GTATGCTATA CGAAGTTAT



OTI 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_001172107 , NM_153528 , NM_001359085
UniProt ID:	Q8CI52
Synonyms:	4921521N14Rik
Summary:	Cholesterol transporter that mediates non-vesicular transport of cholesterol from the plasma membrane (PM) to the endoplasmic reticulum (ER) (PubMed:30220461). Contains unique domains for binding cholesterol and the PM, thereby serving as a molecular bridge for the transfer of cholesterol from the PM to the ER (PubMed:30220461). Plays a crucial role in cholesterol homeostasis and has the unique ability to localize to the PM based on the level of membrane cholesterol (PubMed:30220461). In lipid-poor conditions localizes to the ER membrane and in response to excess cholesterol in the PM is recruited to the endoplasmic reticulum-plasma membrane contact sites (EPCS) which is mediated by the GRAM domain (PubMed:30220461). At the EPCS, the sterol-binding VAST/ASTER domain binds to the cholesterol in the PM and facilitates its transfer from the PM to ER (PubMed:30220461). [UniProtKB/Swiss-Prot Function]

Product images:

