

Product datasheet for **KN212825RB**

LGR5 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:	LGR5
Locus ID:	8549
Components:	<p>KN212825G1, LGR5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGGACAGGAGCACACCGAGC</p> <p>KN212825G2, LGR5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCTCAGCAACACACCGAGC</p> <p>KN212825RBD, 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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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCGGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
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GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
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GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTT CCAGTCACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAG CTGTCGCCGT GCTCATTTGA

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TAACTGCCCG TTATTCATGC GACACCCCTC TCGACTCTTA GATCTGGGTC TCCAGCACGC ATGAAGGGGT
 AAGGGTGGGG GGGTCCCCTA TTCGGGCGCG CGGCGTTGAG CACTGAATCT TCCAGGCCGA GGCTCAGTGG
 GAGCGCCGAG AACTCGCCAG TACCGCGCGC TGCCTGCTGC CTGCTGCCTC CCAGCCCAGG ACTTGGGAAA
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 CTTGCCAGC TCAAAGGGT TTTTAGTCTG CATCCTCACT CTCGCCGTT GACTTTAGA TCAGAAGGGA
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 TCCTGTGTA AATTGTTATC CGCTCACAAT TCCACACAAC ATACGAGCCG GAAGCATAAA GTGTAAAGCC
 TGGGGTGCTT AATGAGTGAG CTAACTCACA TTAATTGCGT TGCGTCACT GCCCGTTTT CAGTCGGGAA
 ACCTGTGCTG CCAGCTGCAT TAATGAATCG GCCAACGCGC GGGGAGAGGC GGTTCGCTA TTGGGCGCTC
 TTCCGCTTCC TCGTCACTG ACTCGTGGC CTCGGTCTGT CGGCTGCGGC GAGCGTATC AGCTCACTCA
 AAGGCGGTAA TACGGTTATC CACAGAATCA GGGATAACG CAGGAAAGAA CATGTGAGCA AAAGGCCAGC
 AAAAGGCCAG GAACCGTAAA AAGGCCGCGT TGCTGGCGTT TTTCCATAGG CTCCGCCCC CTGACGAGCA
 TCACAAAAAT CGACGCTCAA GTCAGAGGTG GCGAAACCCG ACAGGACTAT AAAGATACCA GGCGTTTCCC
 CCTGGAAGCT CCCTCGTGCG CTCTCCTGTT CCGACCCTGC CGCTTACCGG ATACCTGTCC GCCTTTCTCC
 CTTGCGGAAG CGTGGCGCTT TCTCATAGCT CACGCTGTAG GTATCTCAGT TCGGTGTAGG TCGTTCGCTC
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 GAGTCCAACC CGGTAAGACA CGACTTATCG CCACTGGCAG CAGCCACTGG TAACAGGATT AGCAGAGCGA
 GGTATGTAGG CCGTGCTACA GAGTCTTGA AGTGGTGGCC TAACTACGGC TACACTAGAA GAACAGTATT
 TGGTATCTGC GCTCTGCTGA AGCCAGTTAC CTTCGAAAA AGAGTTGGTA GCTCTTGATC CGGCAAACAA
 ACCACCGCTG GTAGCGGTGG TTTTTTTGTT TGCAAGCAGC AGATTACGCG CAGAAAAAA GGATCTCAAG
 AAGATCCTTT GATCTTTTCT ACGGGGTCTG ACGCTCAGTG GAACGAAAAC TCACGTAAAG GGATTTTGGT
 CATGAGATTA TCAAAAAGGA TCTTACCTA GATCCTTTTA AATTAATAA GAAGTTTAA ATCAATCTAA
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 ATCTGGCCCC AGTGCTGCAA TGATACCGCG AGAACACGC TCACCGGCTC CAGATTTATC AGCAATAAAC
 CAGCCAGCCG GAAGGGCCGA GCGCAGAAGT GGTCTGCAA CTTTATCCGC CTCCATCCAG TCTATTAATT
 GTTGCCGGGA AGCTAGAGTA AGTAGTTCGC CAGTTAATAG TTTGCGCAAC GTTGTGCCA TTGCTACAGG
 CATCGTGTG TCACGCTCGT CGTTTGTGAT GGCTTCATTC AGCTCCGTT CCAACGATC

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_001277226](#), [NM_001277227](#), [NM_003667](#), [NR_110596](#)

UniProt ID:

[O75473](#)

Synonyms: FEX; GPR49; GPR67; GRP49; HG38

Summary: The protein encoded by this gene is a leucine-rich repeat-containing receptor (LGR) and member of the G protein-coupled, 7-transmembrane receptor (GPCR) superfamily. The encoded protein is a receptor for R-spondins and is involved in the canonical Wnt signaling pathway. This protein plays a role in the formation and maintenance of adult intestinal stem cells during postembryonic development. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]

Product images:

