

Product datasheet for **KN206527**

HCAR2 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:	HCAR2
Locus ID:	338442
Components:	<p>KN206527G1, HCAR2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGGAAACAGAAAATCCACA</p> <p>KN206527G2, HCAR2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCGAGATGACTTCATTGTCA</p> <p>KN206527D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p> <p>Homologous arm and GFP-puro sequences: pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet</p> <pre> CAACCACTCT GTCCTCATCA AACAGGCAAC TACTGTCTTC TCAGCATTTC CAAAAGAAAT CATATGTCTG CTACTGTTTA TGTCATATGC CTGTTAATTT TTCATGCTAA TTCTTAGTGT TTCTGGAAAA CCTCACTGTT TGGCACCAAA AATTGTTATT GCTATTGTTG TTGTTTTGTT AATTATGTCA GCCAAGCAGA TGACGGTGAA TTAATTCTGC AACGTTGAGT ACTCAGTTGG CATACAAGCA CCCAGCCTTC CAAAGGGATG TCCTTCATGT TTCACTGATT TTCGAATGAC AGTCGGCTTG CCTAAACTTA TCCTTTACAT TTAAGACATT TTGTGGGTTT CCGCTGCCCC AGGGGATTCT TATTACTTGT TTATGCAAAC AGCAGGTTGC ATAAGAGCCT TGCTGGCTTT TTTTTTTTTT TTTTTTTTTA GAGATTCCTG AGTTTCCTGG TAACCATTCA GTCATCTATT TCAACACCCT GACATGACAT AAAGGCAGGC GTGGAACCAC ACGTTCACCA CACAGACACA CACCTCCTTG CTGGAGCATT CACTAGGCCA GCGCTCCAT CGGACTCACT AGCCGCACTC AGCCGGATTT TCCTGTTCAA CCTGGCAGTG GCTGACTTTC TACTGATCAT CTGCCTGCCC TTCCTGATGG ACAACTATGT GAGGCGTTGG GACTGGAAGT TTGGGGACAT CCCTTGCCGG CTGATGCTCT TCATGTTGGC TATGAACCGC CAGGGCAGCA TCATCTTCTT CACGGTGGTG GCGGTAGACA GGTATTTCCG GGTGGTCCAT CCCCACCACG CCCTGAACAA GATCTCCAAT CGGACAGCAG CCATCATCTC TTGCCTTCTG TGGGGCATCA CTATTGCCTT GACAGTCCAC CTCCTGAAGA AGAAGATGCC GATCCAGAAT GCGGTGCAA ATTTGTGAGC CAGCTTCAGC ATCTGCCATA CCTTCCAGTG GCACGAAGCC ATGTTCTCTC TGGAGTTCTT CCTGCCCTTG GGCATCATCC TGTTCTGCTC AGCCAGAATT ATCTGGAGCC TCGGCAGAG ACAAAATGGAC CGGCATGCCA AGATCAAGAG AGCCATCACC TTCATCATGG TGGTGGCCAT CGTCTTTGTC ATCTGCTTCC TTCCAGCGT GGTGTGCGG ATCCGCATCT TCTGGCTCTT GCACACTTCG </pre> <p>GE100003, scramble sequence in pCas-Guide vector</p>



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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_177551](#)

UniProt ID: [Q8TDS4](#)

Synonyms: GPR109A; HCA2; HM74a; HM74b; NIACR1; Puma-g; PUMAG

Summary: Acts as a high affinity receptor for both nicotinic acid (also known as niacin) and (D)-beta-hydroxybutyrate and mediates increased adiponectin secretion and decreased lipolysis through G(i)-protein-mediated inhibition of adenylyl cyclase. This pharmacological effect requires nicotinic acid doses that are much higher than those provided by a normal diet. Mediates nicotinic acid-induced apoptosis in mature neutrophils. Receptor activation by nicotinic acid results in reduced cAMP levels which may affect activity of cAMP-dependent protein kinase A and phosphorylation of target proteins, leading to neutrophil apoptosis. The rank order of potency for the displacement of nicotinic acid binding is 5-methyl pyrazole-3-carboxylic acid = pyridine-3-acetic acid > acifran > 5-methyl nicotinic acid = acipimox >> nicotinic acid = nicotinamide.[UniProtKB/Swiss-Prot Function]

Product images:

