

Product datasheet for KN206527LP

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

HCAR2 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro

Symbol: HCAR2 Locus ID: 338442

Components: KN206527G1, HCAR2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN206527G2, HCAR2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN206527LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

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 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 >>

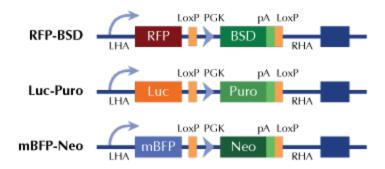
nicotinuric acid = nicotinamide.[UniProtKB/Swiss-Prot Function]





Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter