

### Product datasheet for RC206527L2

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## HCAR2 (NM\_177551) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: HCAR2 (NM\_177551) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: HCAR2

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

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC206527).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_177551

ORF Size: 1089 bp



### HCAR2 (NM\_177551) Human Tagged Lenti ORF Clone - RC206527L2

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>NM 177551.3</u>

 RefSeq Size:
 2082 bp

 RefSeq ORF:
 1092 bp

 Locus ID:
 338442

 UniProt ID:
 Q8TDS4

 Cytogenetics:
 12q24.31

**Protein Families:** Druggable Genome, GPCR, Transmembrane

MW: 41.8 kDa

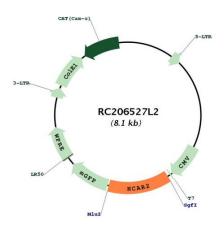
**Gene Summary:** Acts as a high affinity receptor for both nicotinic acid (also known as niacin) and (D)-beta-

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 >>

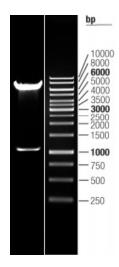
nicotinuric acid = nicotinamide.[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for RC206527L2



Double digestion of RC206527L2 using Sgfl and Mlul