



## Human HCAR2 peptide (DAG-P1098)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Antigen Description</b>	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.
<b>Specificity</b>	Expression largely restricted to adipose tissue and spleen. Expressed on mature neutrophils but not on immature neutrophils or eosinophils.
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the G-protein coupled receptor 1 family.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

**Gene Name** [HCAR2 hydroxycarboxylic acid receptor 2 \[ Homo sapiens \(human\) \]](#)

<b>Official Symbol</b>	HCAR2
<b>Synonyms</b>	HCAR2; hydroxycarboxylic acid receptor 2; HCA2; HM74a; HM74b; PUMAG; NIACR1; Puma-g; GPR109A; niacin receptor 1; nicotinic acid receptor; G protein-coupled receptor 109A; G-protein coupled receptor 109A; G protein-coupled receptor HM74a; G-protein coupled receptor HM74A; hydroxy-carboxylic acid receptor 2;
<b>Entrez Gene ID</b>	<a href="#">338442</a>
<b>mRNA Refseq</b>	<a href="#">NM_177551.3</a>
<b>Protein Refseq</b>	<a href="#">NP_808219.1</a>
<b>UniProt ID</b>	Q8TDS4
<b>Chromosome Location</b>	12q24.31
<b>Pathway</b>	Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; G alpha (i) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem; GPCR ligand binding, organism-specific biosystem; Hydroxycarboxylic acid-binding receptors, organism-specific biosystem; Signal Transduction, organism-specific biosystem; Signaling by GPCR, organism-specific biosystem;
<b>Function</b>	nicotinic acid receptor activity;