10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HCAR2 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI15030

Product Information

Application	WB
Primary Accession	Q8TDS4
Other Accession	NM_177551, NP_808219
Reactivity	Human, Mouse, Rat, Rabbit, Guinea Pig, Bovine
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41850

Additional Information

Gene ID	338442
Alias Symbol	HM74a, HM74b, NIACR1, PUMAG, Puma-g
Other Names	Hydroxycarboxylic acid receptor 2, G-protein coupled receptor 109A, G-protein coupled receptor HM74A, Niacin receptor 1, Nicotinic acid receptor, HCAR2, GPR109A, HCA2, HM74A, NIACR1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-HCAR2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	HCAR2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

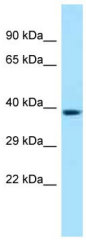
Name	HCAR2
Synonyms	GPR109A, HCA2, HM74A, NIACR1
Function	Acts as a high affinity receptor for both nicotinic acid (also known as niacin) and (D)-beta-hydroxybutyrate and mediates increased adiponectin secretion and decreased lipolysis through G(i)- protein-mediated inhibition of adenylyl cyclase. This 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.
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expression largely restricted to adipose tissue and spleen. Expressed on mature neutrophils but not on immature neutrophils or eosinophils.

References

Wise A.,et al.J. Biol. Chem. 278:9869-9874(2003).
Takeda S.,et al.FEBS Lett. 520:97-101(2002).
Suwa M.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Kostylina G.,et al.Cell Death Differ. 15:134-142(2008).
Offermanns S.,et al.Pharmacol. Rev. 63:269-290(2011).

Images



WB Suggested Anti-HCAR2 Antibody Titration: 1.0 µg/ml
Positive Control: MCF7 Whole Cell