

HM74 Polyclonal Antibody

Catalog No: YT2182

Reactivity: Human; Mouse; Rat

Applications: WB;IF;ELISA

Target: HM74

Fields: >>cAMP signaling pathway

Gene Name: HCAR2/HCAR3

Protein Name: HM74A/HM74B

Human Gene Id: 8843/338442

Human Swiss Prot

Human Swiss Fib

No:

Mouse Gene Id: 80885

Rat Gene Id: 353250

Rat Swiss Prot No: Q80Z39

Immunogen: The antiserum was produced against synthesized peptide derived from human

GPR109. AA range:285-334

P49019/Q8TDS4

Specificity: HM74 Polyclonal Antibody detects endogenous levels of HM74 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other

applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 45kD

Background : developmental stage:Expression in neutrophils occurs in the late terminal

differentiation phase.,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.,miscellaneous: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.,similarity:Belongs to the G-protein coupled receptor 1 family.,tissue specificity:Expression largely restricted to adipose tissue and spleen. Expressed on mature neutrophils but not on

immature neutrophils or eosinophils.,

Function: developmental stage:Expression in neutrophils occurs in the late terminal

differentiation phase.,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.,miscellaneous:The rank order of potency for the displacement of nicotinic acid binding is 5-methyl

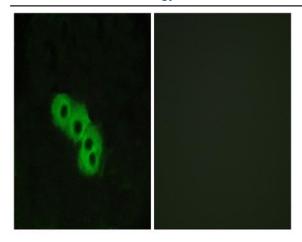
pyrazole-3-carboxylic acid = pyridine-3-acetic acid > acifran > 5-meth

Subcellular Location:

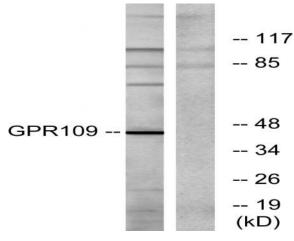
Cell membrane; Multi-pass membrane protein.

Expression : Expression largely restricted to adipose tissue and spleen.

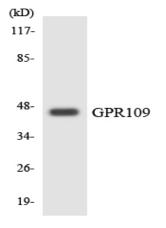
Products Images



Immunofluorescence analysis of MCF7 cells, using GPR109 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from RAW264.7 cells, using GPR109 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HepG2 cells using GPR109 antibody.