

Summary

Production Name	HM74 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	GPR109B
Alternative Names	HCAR3; GPR109B; HCA3; HM74B; NIACR2; Hydroxycarboxylic acid receptor 3; G-protein coupled receptor 109B; G-protein coupled receptor HM74; G-protein coupled receptor HM74B; Niacin receptor 2; Nicotinic acid receptor 2; HCAR2; GPR109A; HCA2;
Gene ID	8843/338442
SwissProt ID	P49019/Q8TDS4. The antiserum was produced against synthesized peptide derived from human GPR109. AA range: 285-334

Application

Dilution Ratio	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
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Molecular Weight 45kD

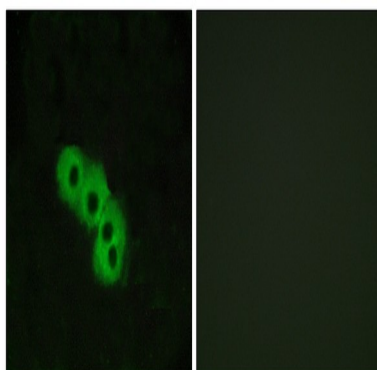
Background

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.,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.,

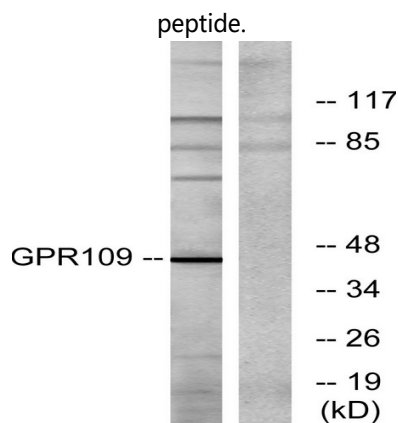
Research Area

Image Data

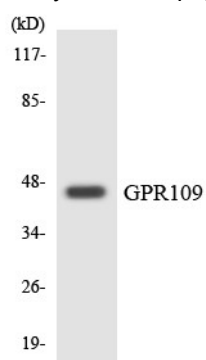
Product Name: HM74 Rabbit Polyclonal Antibody
Catalog #: APRab12095



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.

Note

For research use only.