

**HM74 rabbit pAb****Cat#: orb770763 (Manual)**

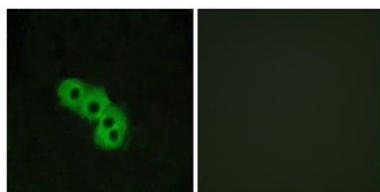
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<b>Product Name</b>	HM74 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human GPR109. AA range:285-334
<b>Specificity</b>	HM74 Polyclonal Antibody detects endogenous levels of HM74 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	G-protein coupled receptor 109B
<b>Gene Name</b>	GPR109B
<b>Cellular localization</b>	Cell membrane; Multi-pass membrane protein.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

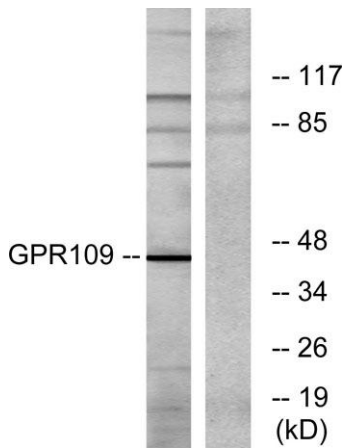
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	45kD
<b>Human Gene ID</b>	8843/338442
<b>Human Swiss-Prot Number</b>	P49019/Q8TDS4
<b>Alternative Names</b>	HCAR3; GPR109B; HCA3; HM74B; NIACR2; Hydroxycarboxylic acid receptor 3; G-protein coupled receptor 109B; G-protein coupled receptor HM74; G-protein coupled receptor HM74B; Niacin receptor 2; Nicotinic acid receptor 2; HCAR2; GPR109A; HCA2;

**Background**

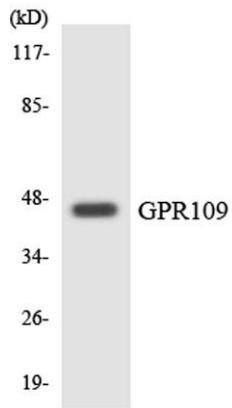
developmental stage:Expression in neutrophils occurs in the late terminal differentiation phase.,function:Acts as a high affinity receptor for both nicotinic acid (also known as niacin) and (D)-beta-hydroxybutyrate and mediates increased adiponectin secretion and decreased lipolysis through G(i)-protein-mediated 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.,



**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.