

NIACR1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12667C**Specification**

NIACR1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q8TDS4
Other Accession	P49019 , Q9EP66 , NP_808219.1
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	200-228

NIACR1 Antibody (Center) - Additional Information**Gene ID** 338442**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

Target/Specificity

This NIACR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 200-228 amino acids of human NIACR1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

NIACR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NIACR1 Antibody (Center) - 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

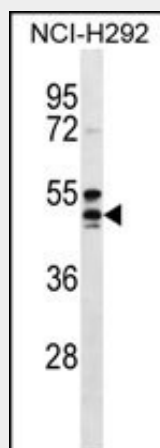
Expression largely restricted to adipose tissue and spleen. Expressed on mature neutrophils but not on immature neutrophils or eosinophils.

NIACR1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NIACR1 Antibody (Center) - Images



NIACR1 Antibody (Center) (Cat. #AP12667c) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the NIACR1 antibody detected the NIACR1 protein (arrow).

NIACR1 Antibody (Center) - Background

NIACR1 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.

NIACR1 Antibody (Center) - References

Li, X., et al. Biochem. Pharmacol. 80(9):1450-1457(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Li, G., et al. J. Biol. Chem. 285(29):22605-22618(2010)
Mandrika, I., et al. Biochem. Biophys. Res. Commun. 395(2):281-287(2010)
Shen, H.C., et al. J. Med. Chem. 53(6):2666-2670(2010)