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NIACR1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP12667c

Specification

NIACR1 Antibody (Center) Blocking peptide - Product Information

Primary Accession Q8TDS4

NIACR1 Antibody (Center) Blocking peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NIACR1 Antibody (Center) Blocking peptide - 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) Blocking peptide - Protocols

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

- Blocking Peptides

NIACR1 Antibody (Center) Blocking peptide - Images

NIACR1 Antibody (Center) Blocking peptide - 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) Blocking peptide - 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)