

FFAR1 Antibody (C-term) Blocking peptide Synthetic peptide

Specification

Catalog # BP12402b

FFAR1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

<u>014842</u>

FFAR1 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 2864

Other Names Free fatty acid receptor 1, G-protein coupled receptor 40, FFAR1, GPR40

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.

FFAR1 Antibody (C-term) Blocking peptide - Protein Information

Name FFAR1

Synonyms GPR40

Function

G-protein coupled receptor for medium and long chain saturated and unsaturated fatty acids that plays an important role in glucose homeostasis. Fatty acid binding increases glucose-stimulated insulin secretion, and may also enhance the secretion of glucagon-like peptide 1 (GLP-1). May also play a role in bone homeostasis; receptor signaling activates pathways that inhibit osteoclast differentiation (By similarity). Ligand binding leads to a conformation change that triggers signaling via G-proteins that activate phospholipase C, leading to an increase of the intracellular calcium concentration. Seems to act through a G(q) and G(i)-mediated pathway. Mediates the anti-inflammatory effects of omega-3 polyunsaturated fatty acids (PUFAs) via inhibition of NLRP3 inflammasome activation.

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Detected in brain and pancreas. Detected in pancreatic beta cells.



FFAR1 Antibody (C-term) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

FFAR1 Antibody (C-term) Blocking peptide - Images

FFAR1 Antibody (C-term) Blocking peptide - Background

This gene encodes a member of the GP40 family of Gprotein-coupled receptors that are clustered together on chromosome19. The encoded protein is a receptor for medium and long chainfree fatty acids and may be involved in the metabolic regulation of insulin secretion. Polymorphisms in this gene may be associated with type 2 diabetes.

FFAR1 Antibody (C-term) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Lu, S.Y., et al. J. Mol. Graph. Model. 28(8):766-774(2010)Del Guerra, S., et al. Nutr Metab Cardiovasc Dis 20(1):22-25(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Nagasumi, K., et al. Diabetes 58(5):1067-1076(2009)