

FFAR1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12402B

Specification

FFAR1 Antibody (C-term) - Product Information

Application WB,E **Primary Accession** 014842 NP 005294.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 31457 Antigen Region 275-300

FFAR1 Antibody (C-term) - Additional Information

Gene ID 2864

Other Names

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

Target/Specificity

This FFAR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 275-300 amino acids from the C-terminal region of human FFAR1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

FFAR1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FFAR1 Antibody (C-term) - 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

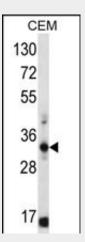
Detected in brain and pancreas. Detected in pancreatic beta cells.

FFAR1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

FFAR1 Antibody (C-term) - Images



FFAR1 Antibody (C-term) (Cat. #AP12402b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the FFAR1 antibody detected the FFAR1 protein (arrow).

FFAR1 Antibody (C-term) - Background

This gene encodes a member of the GP40 family of G protein-coupled receptors that are clustered together on chromosome 19. The encoded protein is a receptor for medium and long chain free 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) - 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)