

FFAR1 / GPR40 Antibody (C-Terminus) Rabbit Polyclonal Antibody

Catalog # ALS10411

Specification

FFAR1 / GPR40 Antibody (C-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P <u>O14842</u> Human, Monkey Rabbit Polyclonal 31kDa KDa WB~~1:1000 IHC-P~~N/A

FFAR1 / GPR40 Antibody (C-Terminus) - Additional Information

Gene ID 2864

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

Target/Specificity Human GPR40. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage Long term: -70°C; Short term: +4°C

Precautions FFAR1 / GPR40 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

FFAR1 / GPR40 Antibody (C-Terminus) - 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.

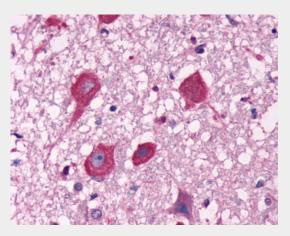
Volume 50 μl

FFAR1 / GPR40 Antibody (C-Terminus) - Protocols

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

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

FFAR1 / GPR40 Antibody (C-Terminus) - Images



Anti-GPR40 antibody ALS10411 IHC of human brain, neurons.

FFAR1 / GPR40 Antibody (C-Terminus) - Background

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.

FFAR1 / GPR40 Antibody (C-Terminus) - References

Sawzdargo M., et al. Biochem. Biophys. Res. Commun. 239:543-547(1997).



Briscoe C.P., et al.J. Biol. Chem. 278:11303-11311(2003). Tomita T., et al.Biochem. Biophys. Res. Commun. 338:1788-1790(2005). Sum C.S., et al.J. Biol. Chem. 282:29248-29255(2007). Sum C.S., et al.J. Biol. Chem. 284:3529-3536(2009).