

### FFAR1 / GPR40 Antibody (Cytoplasmic Domain) Rabbit Polyclonal Antibody Catalog # ALS10412

### Specification

## FFAR1 / GPR40 Antibody (Cytoplasmic Domain) - Product Information

Application Primary Accession Host Clonality Calculated MW Dilution IHC-P <u>014842</u> Rabbit Polyclonal 31kDa KDa IHC-P~~N/A

### FFAR1 / GPR40 Antibody (Cytoplasmic Domain) - 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 (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

### FFAR1 / GPR40 Antibody (Cytoplasmic Domain) - 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 (Cytoplasmic Domain) - Protocols

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

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

## FFAR1 / GPR40 Antibody (Cytoplasmic Domain) - Images



Human Pancreas: Formalin-Fixed, Paraffin-Embedded (FFPE)

## FFAR1 / GPR40 Antibody (Cytoplasmic Domain) - Background

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## FFAR1 / GPR40 Antibody (Cytoplasmic Domain) - 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).



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