

### FFAR1 / GPR40 Antibody

Rabbit Polyclonal Antibody Catalog # ALS13134

### **Specification**

# FFAR1 / GPR40 Antibody - Product Information

Application WB, IHC
Primary Accession O14842
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 31kDa KDa

# FFAR1 / GPR40 Antibody - Additional Information

**Gene ID 2864** 

#### **Other Names**

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

# **Target/Specificity**

Human GPR40.

#### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

#### **Precautions**

FFAR1 / GPR40 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# FFAR1 / GPR40 Antibody - 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.

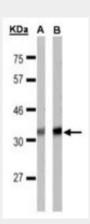
**Volume** 50 μl

# FFAR1 / GPR40 Antibody - Protocols

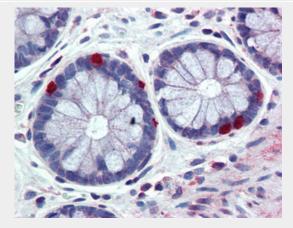
Provided below are standard protocols that you may find useful for product applications.

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

# FFAR1 / GPR40 Antibody - Images

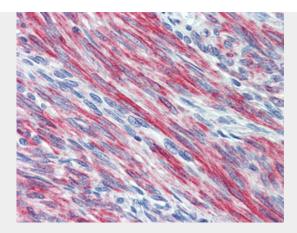


Sample(30 g of whole cell lysate).



Anti-GPR40 antibody IHC of human colon.





Anti-GPR40 antibody IHC of human uterus.

# FFAR1 / GPR40 Antibody - Background

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# FFAR1 / GPR40 Antibody - 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).