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Anti-GPR40 Antibody

Catalog # AP60710

Product Information

Application	WB, IF/IC
Primary Accession	O14842
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31457

Additional Information

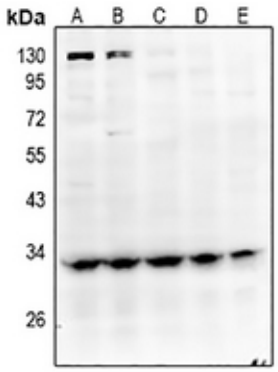
Gene ID	2864
Other Names	GPR40; Free fatty acid receptor 1; G-protein coupled receptor 40
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GPR40. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

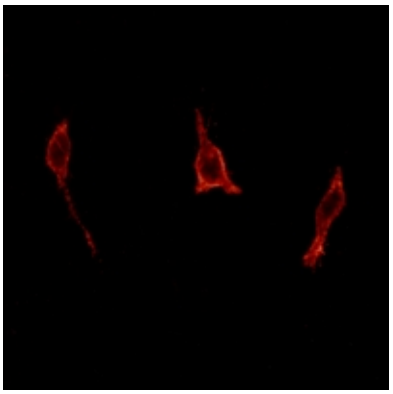
Name	FFAR1
Synonyms	GPR40
Function	G protein-coupled receptor for medium and long chain saturated and unsaturated fatty acids that plays an important role in glucose homeostasis. Fatty acid binding increases glucose-stimulated insulin secretion, and may also enhance the secretion of glucagon-like peptide 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.

Images



Western blot analysis of GPR40 expression in SGC7901 (A), A2780 (B), Panc1 (C), mouse brain (D), rat brain (E) whole cell lysates. (Predicted band size: 31 kD; Observed band size: 31 kD)



Immunofluorescent analysis of GPR40 staining in LOVO cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.