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Anti-GPCR19 Antibody

Catalog # AP53816

Product Information

Application	WB
Primary Accession	Q8TDU6
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35248

Additional Information

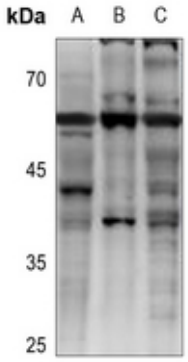
Gene ID	151306
Other Names	TGR5; G-protein coupled bile acid receptor 1; G-protein coupled receptor GPCR19; hGPCR19; Membrane-type receptor for bile acids; M-BAR; hBG37; BG37
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human GPCR19. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000
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	GPBAR1 (HGNC:19680)
Function	G protein-coupled receptor for bile acid (PubMed: 12419312, PubMed:12524422, PubMed:32698187, PubMed:32747649, PubMed:35858343). Bile acid-binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:12419312, PubMed:12524422, PubMed:32698187, PubMed:32747649, PubMed:35858343). GPBAR1 is coupled to G(s) G proteins and mediates activation of adenylate cyclase activity (PubMed:12419312, PubMed:12524422, PubMed:32698187, PubMed:32747649, PubMed:35858343). Activated by bile acids, such as lithocholate, deoxycholate, chenodeoxycholate and cholate, in descending order (PubMed:12524422, PubMed:32698187). Apart from their role in lipid dietary absorption and cholesterol catabolism, bile acids act as an important signaling molecule, involved in processes, such as energy expenditure or

	tissue inflammation (PubMed:26541439). GPBAR1-mediated signaling promotes energy expenditure and adiposity reduction in brown adipose tissue by activating adenylate cyclase, leading to DIO2 activation (By similarity). Involved in bile acid promoted GLP-1 secretion (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Ubiquitously expressed. Expressed at higher level in spleen and placenta. Expressed at lower level in other tissues. In digestive tissues, it is expressed in stomach, duodenum, ileocecum, ileum, jejunum, ascending colon, transverse colon, descending colon, cecum and liver, but not in esophagus and rectum

Images



Western blot analysis of GPCR19 expression in Hela (A), HCT116 (B), A549 (C) whole cell lysates. (Predicted band size: 35 kD; Observed band size: 60 kD)

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