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GPBAR1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI15071

Product Information

Application	WB
Primary Accession	Q8TDU6
Other Accession	NM_170699, NP_733800
Reactivity	Human, Rat
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35248

Additional Information

Gene ID	151306
Alias Symbol	BG37, GPCR, GPCR19, GPR131, M-BAR, MGC40597, TGR5
Other Names	G-protein coupled bile acid receptor 1, G-protein coupled receptor GPCR19, hGPCR19, Membrane-type receptor for bile acids, M-BAR, hBG37, BG37, GPBAR1, TGR5
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-GPBAR1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	GPBAR1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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).

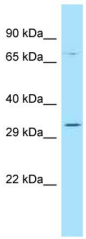
Cellular Location Cell membrane; Multi-pass membrane protein

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

References

Maruyama T.,et al.Biochem. Biophys. Res. Commun. 298:714-719(2002).
Kawamata Y.,et al.J. Biol. Chem. 278:9435-9440(2003).
Takeda S.,et al.FEBS Lett. 520:97-101(2002).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Images



WB Suggested Anti-GPBAR1 Antibody Titration: 1.0 µg/ml
Positive Control: MCF7 Whole Cell