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Anti-GPBAR1 / TGR5 Antibody (Cytoplasmic Domain)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17509

Product Information

Application	IHC-P
Primary Accession	Q8TDU6
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35248
Concentration (mg/ml)	0.87 mg/ml

Additional Information

Gene ID	151306
Alias Symbol	GPBAR1
Other Names	GPBAR1, BG37, GPR131, HGPCR19, M-BAR, GPCR19, TGR5, GPCR TGR5, HBG37, Membrane bile acid receptor
Target/Specificity	Human TGR5. BLAST analysis of the peptide immunogen showed no homology with other human proteins.
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-GPBAR1 / TGR5 Antibody (Cytoplasmic Domain) 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

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