

Basic Information

Product Name	Anti-GPBAR1 Antibody	
Gene Name	GPBAR1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human GPCR TGR5/GPBAR1 recombinant protein (Position: N76-S310).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	45 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

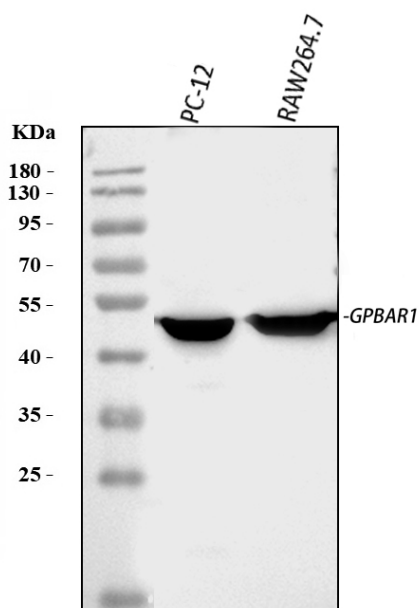
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

The G protein-coupled bile acid receptor 1 (GPBAR1) also known G-protein coupled receptor 19 (GPCR19), membrane-type receptor for bile acids (M-BAR) or TGR5 as is a protein that in humans is encoded by the GPBAR1 gene. This gene encodes a member of the G protein-coupled receptor (GPCR) superfamily. This enzyme functions as a cell surface receptor for bile acids. Treatment of cells expressing this GPCR with bile acids induces the production of intracellular cAMP, activation of a MAP kinase signaling pathway, and internalization of the receptor. The receptor is implicated in the suppression of macrophage functions and regulation of energy homeostasis by bile acids. Alternative splicing results in multiple transcript variants encoding the same protein.

Selected Validation Data



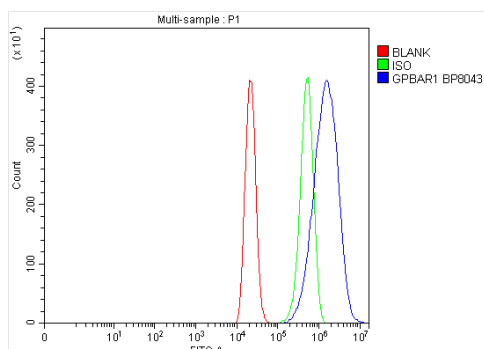
Western blot analysis of GPBAR1 using anti-GPBAR1 antibody (A01958-2).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: PC-12 whole cell lysates,

Lane 2: RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-GPBAR1 antigen affinity purified polyclonal antibody (A01958-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GPBAR1 at approximately 45 kDa. The expected band size for GPBAR1 is at 35 kDa.



Flow Cytometry analysis of THP-1 cells using anti-GPBAR1 antibody (A01958-2).

Overlay histogram showing THP-1 cells stained with A01958-2 (Blue line).

The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-GPBAR1 Antibody (A01958-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.