

# Monoclonal Anti-human GPBAR1-Phycoerythrin

Catalog Number: FAB4286P

Lot Number: ABGV01

100 Tests

## Reagents Provided

### Phycoerythrin (PE)-conjugated mouse monoclonal anti-human

**GPBAR1:** Supplied as 25 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

**Clone #:** 409522

**Isotype:** mouse IgG<sub>2b</sub>

## Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

## Storage

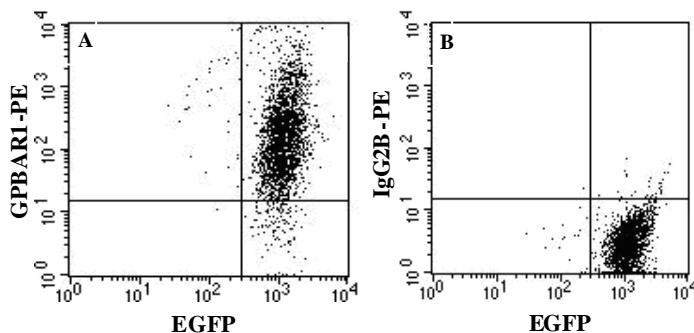
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

## Intended Use


Designed to quantitatively determine the percentage of cells bearing GPBAR1 within a population and qualitatively determine the density of GPBAR1 on cell surfaces by flow cytometry.

## Product Description

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with NS0 cells transfected with human GPBAR1 (Accession # NP\_733800). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to PE fluorochrome. Cell surface expression of GPBAR1 is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 565 - 605 nm.



HEK 293 cells transfected with GPBAR1 and EGFP were stained with  
A) PE-conjugated anti-human GPBAR1 (Catalog # FAB4286P) or  
B) isotype control (Catalog # IC0041P).

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FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

## Background Information

G protein coupled bile acid receptor 1 (GPBAR1), also called M-BAR, BG37, or TGR-5, is a widely expressed G-protein coupled receptor superfamily member that serves as a cell surface receptor for bile acids. On macrophages, bile acid engagement of GPBAR1 suppresses phagocytosis and other functions. Extracellular portions of human GPBAR1 show approximately 75% amino acid identity with corresponding regions of mouse GPBAR1.

## Flow Cytometry Validation

This antibody has been tested for flow cytometry using GPBAR1/EGFP transfected HEK293 cells.

- Cells may be Fc-blocked with 1 µg of human IgG/10<sup>5</sup> cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 µL of conjugated antibody was added to 1 - 2.5 x 10<sup>5</sup> cells and incubated for 30 minutes at room temperature.
- Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Human Lyse Buffer (Catalog # FC002).
- The cells were resuspended in Flow Cytometry Staining Buffer for final flow cytometric analysis. As a control for this analysis, cells in a separate tube should be treated with PE-labeled mouse IgG<sub>2b</sub> antibody. This procedure may need to be modified, depending upon the cell type and final utilization. Individual users may need to titrate to determine the optimal reagent amount for their specific use.

**Warning:** Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

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