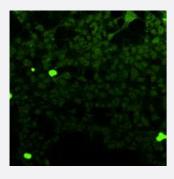


# Ffar1 monoclonal antibody, clone G16

Catalog # MAB1714 Size 25 ug

## **Applications**



#### Immunofluorescence

Immunofluorescence analysis of HEK 293T cells overexpressing human FFAR1, using Ffar1 monoclonal antibody, clone G16 (Cat # MAB1714) .

Specification	
Product Description	Mouse monoclonal antibody raised against synthetic peptide of Ffar1.
Immunogen	A synthetic peptide corresponding to mouse Ffar1.
Host	Mouse
Reactivity	Mouse
Form	Liquid
Preparation Method	The splenic lymphocytes from GANP mouse, immunized with the first extracellular domain peptides of mouse Ffar1 conjugated with KLH, were fused to myeloma P3U1 cells. The screening of the hybrido ma cells was performed on ELISA. The cell line with positive reaction was grown on non-serum medium, from which the antibody was purified by Protein G affinity chromatography.
Purification	Protein G affinity chromatography
Isotype	lgG2a, kappa
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.



#### **Product Information**

Recommend Usage	Flow Cytometry (0.5 ug/mL) Immunocytochemistry (1 ug/mL) Immunofluorescence The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.1% proclin, 2.0% Block Ace).
Storage Instruction	Store at below -20°C. Once thawed, store at 4°C. Aliquot to avoid repeated freezing and thawing.

### **Applications**

- Immunocytochemistry
- Immunofluorescence

Immunofluorescence analysis of HEK 293T cells overexpressing human FFAR1, using Ffar1 monoclonal antibody, clone G16 (Cat # MAB1714) .

Flow Cytometry

Gene Info — Ffar1	
Entrez GenelD	<u>233081</u>
Gene Name	Ffar1
Gene Alias	Gpr40
Gene Description	free fatty acid receptor 1
Gene Ontology	<u>Hyperlink</u>
Other Designations	G protein-coupled receptor 40 G protein-coupled receptor GPR40

### **Publication Reference**

• Production and characterization of a monoclonal antibody against GPR40 (FFAR1; free fatty acid receptor 1).

Hirasawa A, Itsubo C, Sadakane K, Hara T, Shinagawa S, Koga H, Nose H, Koshimizu TA, Tsujimoto G. Biochemical and Biophysical Research Communications 2008 Jan; 365(1):22.

Application: Flow Cyt, IF, IHC, IP, Human, Mouse, HEK 293 cells, Human PBMCs, Mouse spleen





 The FFA receptor GPR40 links hyperinsulinemia, hepatic steatosis, and impaired glucose homeostasis in mouse.

Steneberg P, Rubins N, Bartoov-Shifman R, Walker MD, Edlund H.

Cell Metabolism 2005 Apr; 1(4):245.

• Oleate promotes the proliferation of breast cancer cells via the G protein-coupled receptor GPR40.

Hardy S, St-Onge GG, Joly E, Langelier Y, Prentki M.

The Journal of Biological Chemistry 2005 Apr; 280(14):13285.

Free fatty acids regulate insulin secretion from pancreatic beta cells through GPR40.

ttoh Y, Kawamata Y, Harada M, Kobayashi M, Fujii R, Fukusumi S, Ogi K, Hosoya M, Tanaka Y, Uejima H, Tanaka H, Maruyama M, Satoh R, Okubo S, Kizawa H, Komatsu H, Matsumura F, Noguchi Y, Shinohara T, Hinuma S, Fujisawa Y, Fujino M. Nature 2003 Mar; 422(6928):173.

• The orphan G protein-coupled receptor GPR40 is activated by medium and long chain fatty acids.

Briscoe CP, Tadayyon M, Andrews JL, Benson WG, Chambers JK, Eilert MM, Ellis C, Elshourbagy NA, Goetz AS, Minnick DT, Murdock PR, Sauls HR Jr, Shabon U, Spinage LD, Strum JC, Szekeres PG, Tan KB, Way JM, Ignar DM, Wilson S, Muir Al.

The Journal of Biological Chemistry 2002 Mar; 278(13):11303.