DATASHEET

GPR68 Rabbit Polyclonal Antibody

CAT. NO. APA09286

KEY FEATURES

Target	GPR68	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Proton-sensing G-protein coupled receptor activated by extracellular pH, which is required to monitor pH changes and generate adaptive reactions . The receptor is almost silent at pH 7.8 but fully activated at pH 6.8 . Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as phospholipase C . GPR68 is mainly coupled to G(q) G proteins and mediates production of diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) . Acts as a key mechanosensor of fluid shear stress and membrane stretch . Expressed in endothelial cells of small-diameter resistance arteries, where it mediates flow-induced dilation in response to shear stress .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:100 - 1:500

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to GPR68
Specificity	Recognizes endogenous levels of GPR68 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GPR68. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 41 kD; Observed: 41 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	OGR1; Ovarian cancer G-protein coupled receptor 1; OGR-1; G-protein coupled receptor 68; GPR12A; Sphingosylphosphorylcholine receptor
Gene Symbol	GPR68
Entrez Gene	8111(Human); 238377(Mouse)
SwissProt	Q15743(Human); Q8BFQ3(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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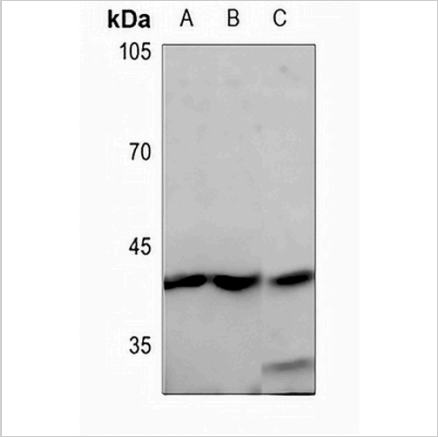
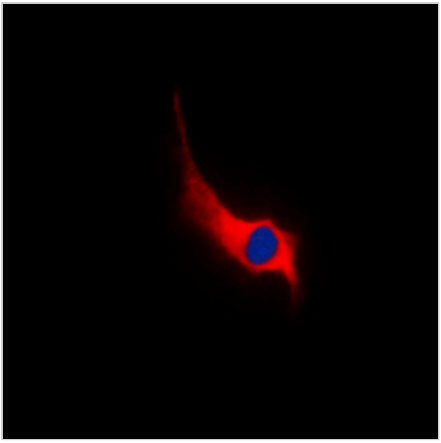
DATA



Western blot analysis of GPR68 expression in mouse muscle (A), mouse testis (B), rat testis (C) whole cell lysates. (Predicted band size: 41 kD; Observed band size: 41 kD)



Immunofluorescent analysis of GPR68 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.