## BACKGROUND

G protein-coupled receptors (GPRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, comprise a superfamily of proteins that play a role in many different stimulus-response pathways. G protein-coupled receptors translate extracellular signals into intracellular signals (G protein activation) and they respond to a variety of signaling molecules, such as hormones and neurotransmitters. GPR68 (G protein-coupled receptor 68), also known as OGR1 (ovarian cancer G protein-coupled receptor 1 ), is a 365 amino acid multi-pass membrane protein that is expressed in testis, spleen, lung, brain and placenta. Existing as a member of the $G$ protein-coupled receptor family, GPR68 functions as a high affinity receptor for sphingosylphosphorylcholine and is coupled to $G$ proteins that enhance phosphoinositide hydrolysis.

## REFERENCES

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4. Schöneberg, T., et al. 2002. The structural basis of $G$ protein-coupled receptor function and dysfunction in human diseases. Rev. Physiol. Biochem. Pharmacol. 144: 143-227.
5. Ludwig, M.G., et al. 2003. Proton-sensing G protein-coupled receptors. Nature 425: 93-98.
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## CHROMOSOMAL LOCATION

Genetic locus: GPR68 (human) mapping to 14q32.11; Gpr68 (mouse) mapping to 12 E .

## SOURCE

GPR68 (H-75) is a rabbit polyclonal antibody raised against amino acids 291-365 mapping within a C-terminal cytoplasmic domain of GPR68 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## APPLICATIONS

GPR68 (H-75) is recommended for detection of GPR68 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 $\mu \mathrm{g}$ per $100-500 \mu \mathrm{~g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).
GPR68 (H-75) is also recommended for detection of GPR68 in additional species, including equine.
Suitable for use as control antibody for GPR68 siRNA (h): sc-75185, GPR68 siRNA (m): sc-75186, GPR68 shRNA Plasmid (h): sc-75185-SH, GPR68 shRNA Plasmid (m): sc-75186-SH, GPR68 shRNA (h) Lentiviral Particles: sc-75185-V and GPR68 shRNA (m) Lentiviral Particles: sc-75186-V.

Molecular Weight of GPR68: 41 kDa .
Positive Controls: mouse brain extract: sc-2235.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {TM }}$ Mounting Medium: sc-24941.

## DATA



GPR68 (H-75): sc-98437. Western blot analysis of
GPR68 expression in mouse brain tissue extract.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ DO NOT FREEZE ${ }^{* *}$. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

