## SANTA CRUZ BIOTECHNOLOGY, INC.

# GPR68 (H-75): sc-98437



## 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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- 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.
- Ludwig, M.G., et al. 2003. Proton-sensing G protein-coupled receptors. Nature 425: 93-98.
- Vassilatis, D.K., et al. 2003. The G protein-coupled receptor repertoires of human and mouse. Proc. Natl. Acad. Sci. USA 100: 4903-4908.
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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  $\mu g$  IgG 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  $\mu$ g per 100-500  $\mu$ 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 Marker™ compatible goat anti-rabbit 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™ 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° 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.