SANTA CRUZ BIOTECHNOLOGY, INC.

GPR63 (H-40): sc-134911

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

GPR63 (probable G protein-coupled receptor 63, PSP24b) is a 419 amino acid protein encoded by the human GPR63 gene. GPR63 is an orphan receptor member of the G protein-coupled receptor 1 family. G protein-coupled receptors (GPCRs, or GPRs) contain 7 transmembrane domains and transduce extracellular signals through heterotrimeric G proteins. Key roles for G protein-coupled receptors include control of protein maturation and cell surface delivery and providing the correct framework for interactions with both hetero-trimeric G proteins and arrestins to allow signal generation and its termination. GPR63 is expressed in brain tissue, most notably frontal cortex, with lower levels in the thalamus, caudate, hypothalamus and midbrain.

REFERENCES

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2. Cikos, S., Gregor, P. and Koppel, J. 2001. Cloning of a novel biogenic amine receptor-like G protein-coupled receptor expressed in human brain. Biochim. Biophys. Acta 1521: 66-72.
3. Takeda, S., Kadowaki, S., Haga, T., Takaesu, H. and Mitaku, S. 2002. Identification of G protein-coupled receptor genes from the human genome sequence. FEBS Lett. 520: 97-101.
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5. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
6. Milligan, G. 2007. A day in the life of a G protein-coupled receptor: the contribution to function of G protein-coupled receptor dimerization. Br. J. Pharmacol. 153: S216-S229.
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CHROMOSOMAL LOCATION

Genetic locus: GPR63 (human) mapping to 6q16.1; Gpr63 (mouse) mapping to 4 A3.

SOURCE

GPR63 (H-40) is a rabbit polyclonal antibody raised against amino acids 128-167 mapping within an internal region of GPR63 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

GPR63 (H-40) is recommended for detection of GPR63 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

GPR63 (H-40) is also recommended for detection of GPR63 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPR63 siRNA (h): sc-62401, GPR63 siRNA (m): sc-62402, GPR63 shRNA Plasmid (h): sc-62401-SH, GPR63 shRNA Plasmid (m): sc-62402-SH, GPR63 shRNA (h) Lentiviral Particles: sc-62401-V and GPR63 shRNA (m) Lentiviral Particles: sc-62402-V.

Molecular Weight of GPR63: 48 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410.

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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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