

# GPR61 (E-15): sc-54601

## BACKGROUND

GPR61 (probable G protein-coupled receptor 61, biogenic amine receptor-like G protein-coupled receptor) is a 451 amino acid protein encoded by the human GPR61 gene. GPR61 is an orphan receptor member of the G protein-coupled receptor 1 family. G protein-coupled receptors (GPCRs, or GPRs) contain seven 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 heterotrimeric G proteins and arrestins to allow signal generation and termination. GPR61 is expressed in brain tissue, most notably frontal and temporal lobes, occipital pole, amygdala and hippocampus. It is also expressed in testis.

## REFERENCES

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- Cikos, S., et al. 2001. Cloning of a novel biogenic amine receptor-like G protein-coupled receptor expressed in human brain. *Biochim. Biophys. Acta* 1521: 66-72.
- Takeda, S., et al. 2002. Identification of G protein-coupled receptor genes from the human genome sequence. *FEBS Lett.* 520: 97-101.
- Conner, A.C., et al. 2004. A key role for transmembrane prolines in calcitonin receptor-like receptor agonist binding and signalling: implications for family B G-protein-coupled receptors. *Mol. Pharmacol.* 67: 20-31.
- Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. *Nature* 441: 315-321.
- 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.
- Oldham, W.M., et al. 2007. Heterotrimeric G protein activation by G-protein-coupled receptors. *Nat. Rev. Mol. Cell Biol.* 9: 60-71.

## CHROMOSOMAL LOCATION

Genetic locus: GPR61 (human) mapping to 1p13.3; Gpr61 (mouse) mapping to 3 F2.3.

## SOURCE

GPR61 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of GPR61 of human origin.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## PRODUCT

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

Blocking peptide available for competition studies, sc-54601 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GPR61 (E-15) is recommended for detection of GPR61 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

GPR61 (E-15) is also recommended for detection of GPR61 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPR61 siRNA (h): sc-106738, GPR61 siRNA (m): sc-145736, GPR61 shRNA Plasmid (h): sc-106738-SH, GPR61 shRNA Plasmid (m): sc-145736-SH, GPR61 shRNA (h) Lentiviral Particles: sc-106738-V and GPR61 shRNA (m) Lentiviral Particles: sc-145736-V.

Molecular Weight of GPR61: 49 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 or 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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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