

# GPR-137 (Y-13): sc-247044

## BACKGROUND

G protein-coupled receptors (GPRs or GPCRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, are members of the largest protein family and play a role in many different stimulus-response pathways. G protein-coupled receptors mediate extracellular signals into intracellular signals (G protein activation). They respond to a wide variety of signaling molecules, including hormones, neurotransmitters and other proteins and peptides. GPR proteins are usually integral 7 pass membrane proteins with some conserved amino acid regions. GPR-137 (G protein-coupled receptor 137), also known as TM7SF1L1 (transmembrane 7 superfamily member 1-like 1 protein), C11orf4 or GPR-137A, is a 417 amino acid multi-pass membrane protein that belongs to the GPR-137 family. Existing as three alternatively spliced isoforms, the gene encoding GPR-137 maps to human chromosome 11q13.1.

## REFERENCES

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- Zaslavsky, A., Singh, L.S., Tan, H., Ding, H., Liang, Z. and Xu, Y. 2006. Homo- and hetero-dimerization of LPA/S1P receptors, OGR1 and GPR4. *Biochim. Biophys. Acta* 1761: 1200-1212.
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## CHROMOSOMAL LOCATION

Genetic locus: GPR137 (human) mapping to 11q13.1; Gpr137 (mouse) mapping to 19 A.

## SOURCE

GPR-137 (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of GPR-137 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.

## 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-247044 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GPR-137 (Y-13) is recommended for detection of GPR-137 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).

GPR-137 (Y-13) is also recommended for detection of GPR-137 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPR-137 siRNA (h): sc-96934, GPR-137 siRNA (m): sc-145689, GPR-137 shRNA Plasmid (h): sc-96934-SH, GPR-137 shRNA Plasmid (m): sc-145689-SH, GPR-137 shRNA (h) Lentiviral Particles: sc-96934-V and GPR-137 shRNA (m) Lentiviral Particles: sc-145689-V.

Molecular Weight of GPR-137: 46 kDa.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.