

LGR4 (H-142): sc-292344

BACKGROUND

G protein-coupled receptors (GPCRs), also designated seven transmembrane (7TM) receptors or heptahelical receptors, interact with G proteins (heterotrimeric GTPases) to synthesize intracellular second messengers, such as diacylglycerol, cyclic AMP, inositol phosphates and calcium ions. Their diverse biological functions range from vision and olfaction to neuronal and endocrine signaling and are involved in many pathological conditions. LGR4 (leucine-rich repeat-containing G protein-coupled receptor 4), also known as GPR48, is a 951 amino acid multi-pass membrane protein that contains 15 LRR (leucine-rich repeats) and belongs to the GPCR family. Expressed in multiple tissues, including testis, ovary, placenta, stomach, heart, kidney, pancreas and spleen, LGR4 functions as an orphan receptor that may be involved in physiologic activities throughout the cell. LGR4 is overexpressed in various cancer types and is thought to enhance carcinoma invasiveness and metastasis, suggesting an important role in tumor progression.

CHROMOSOMAL LOCATION

Genetic locus: LGR4 (human) mapping to 11p14.1; Lgr4 (mouse) mapping to 2 E3.

SOURCE

LGR4 (H-142) is a rabbit polyclonal antibody raised against amino acids 810-951 mapping at the C-terminus of LGR4 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.

STORAGE

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

APPLICATIONS

LGR4 (H-142) is recommended for detection of LGR4 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).

LGR4 (H-142) is also recommended for detection of LGR4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LGR4 siRNA (h): sc-62557, LGR4 siRNA (m): sc-62558, LGR4 shRNA Plasmid (h): sc-62557-SH, LGR4 shRNA Plasmid (m): sc-62558-SH, LGR4 shRNA (h) Lentiviral Particles: sc-62557-V and LGR4 shRNA (m) Lentiviral Particles: sc-62558-V.

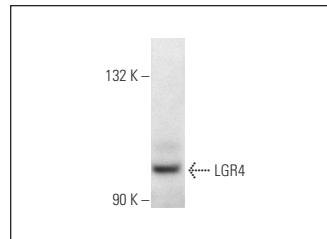
Molecular Weight of LGR4: 104 kDa.

Positive Controls: U-937 cell lysate: sc-2239.

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



LGR4 (H-142): sc-292344. Western blot analysis of LGR4 expression in U-937 whole cell lysate.

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.


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Try **LGR4 (C-12): sc-390630**, our highly recommended monoclonal alternative to LGR4 (H-142).