

LGR6 (K-17): sc-48235

BACKGROUND

G protein-coupled receptors (GPCRs), also designated seven transmembrane (7TM) receptors and heptahelical receptors, are a protein family which 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. The GPCR family represents the largest class of targets for modern drugs. Leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) is an orphan-A GPCR with an N-terminal ectodomain comprising variable leucine-rich repeats, a 7TM region and a unique C-terminal intracellular tail. The sequence of LGR6 is similar to TSHR, FSHR and LHR. LGR6 is predominantly expressed in the adrenal gland, ovary and uterus.

REFERENCES

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- Probst, W.C., Snyder, L.A., Schuster, D.I., Brosius, J. and Sealfon, S.C. 1992. Sequence alignment of the G protein-coupled receptor superfamily. *DNA Cell Biol.* 11: 1-20.
- Hsu, S.Y., Kudo, M., Chen, T., Nakabayashi, K., Bhalla, A., van der Spek, P.J., van Duin, M. and Hsueh, A.J. 2001. The three subfamilies of leucine-rich repeat-containing G protein-coupled receptors (LGR): identification of LGR6 and LGR7 and the signaling mechanism for LGR7. *Mol. Endocrinol.* 14: 1257-1271.
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CHROMOSOMAL LOCATION

Genetic locus: LGR6 (human) mapping to 1q32.1; Lgr6 (mouse) mapping to 1 E4.

SOURCE

LGR6 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LGR6 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.

Blocking peptide available for competition studies, sc-48235 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

LGR6 (K-17) is recommended for detection of LGR6 isoforms 1, 2 and 3 of mouse 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).

LGR6 (K-17) is also recommended for detection of LGR6 isoforms 1, 2 and 3 in additional species, including equine.

Suitable for use as control antibody for LGR6 siRNA (h): sc-60932, LGR6 siRNA (m): sc-60933, LGR6 shRNA Plasmid (h): sc-60932-SH, LGR6 shRNA Plasmid (m): sc-60933-SH, LGR6 shRNA (h) Lentiviral Particles: sc-60932-V and LGR6 shRNA (m) Lentiviral Particles: sc-60933-V.

Molecular Weight of LGR6 isoforms: 104/89/99 kDa.

Positive Controls: HISM cell lysate: sc-2229, HeLa whole cell lysate: sc-2200 or HUV-EC-C whole cell lysate: sc-364180.

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 or our catalog for detailed protocols and support products.



Try **LGR6 (F-5): sc-393010**, our highly recommended monoclonal alternative to LGR6 (K-17).