SANTA CRUZ BIOTECHNOLOGY, INC.

LGR5 (634J2E): sc-517661

SANTA CRUZ®

BIOTECHNOLOGY

The Power to Question

BACKGROUND

G protein-coupled receptors (GPCRs), also designated seven transmembrane (7TM) receptors or heptahelical receptors, interact with G proteins (hetero-trimeric 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. LGR5 (leucine-rich repeat-containing G protein-coupled receptor 5), also known as GPR49 or GPR67, is a 907 amino acid multi-pass membrane protein that contains 17 leucine-rich repeats and belongs to the G protein-coupled receptor family. Expressed in placenta, skeletal muscle and spinal cord, LGR5 functions as an orphan receptor that is thought to play an important role in embryonic growth control and cellular differentiation. Overexpression of LGR5 is associated with increased tumor susceptibility and malignant transformation, implicating LGR5 as a potent tumor-inducing protein.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LGR5 (human) mapping to 12q21.1.

SOURCE

LGR5 (634J2E) is a mouse monoclonal antibody raised against a KLH-coupled peptide corresponding to amino acids 689-719 of LGR5 of human origin.

PRODUCT

Each vial contains 100 µg IgG$_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LGR5 (634J2E) is recommended for detection of LGR5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for LGR5 siRNA (h): sc-62559, LGR5 shRNA Plasmid (h): sc-62559-SH and LGR5 shRNA (h) Lentiviral Particles: sc-62559-V.

Molecular Weight of LGR5: 100 kDa.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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