

GPR177 (N-15): sc-138326

BACKGROUND

G protein-coupled receptors (GPRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, comprise a superfamily of proteins that play a role in many different stimulus-response pathways. G protein coupled receptors translate extracellular signals into intracellular signals (G protein activation) and they respond to a variety of signaling molecules, such as hormones and neurotransmitters. GPR177 (G protein-coupled receptor 177), also known as EVI, MRP, WLS or C1orf139, is a 541 amino acid multi-pass membrane protein that plays an essential role in Wnt-mediated cell-cell communication. The gene encoding GPR177 maps to human chromosome 1 and is expressed as multiple alternatively spliced isoforms.

REFERENCES

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8. Bartscherer, K., et al. 2006. Secretion of Wnt ligands requires Evi, a conserved transmembrane protein. *Cell* 125: 523-533.
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CHROMOSOMAL LOCATION

Genetic locus: WLS (human) mapping to 1p31.3; Wls (mouse) mapping to 3 H4.

SOURCE

GPR177 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of GPR177 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-138326 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR177 (N-15) is recommended for detection of GPR177 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); non cross-reactive with other GPR family members.

GPR177 (N-15) is also recommended for detection of GPR177 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPR177 siRNA (h): sc-88713, GPR177 siRNA (m): sc-145725, GPR177 shRNA Plasmid (h): sc-88713-SH, GPR177 shRNA Plasmid (m): sc-145725-SH, GPR177 shRNA (h) Lentiviral Particles: sc-88713-V and GPR177 shRNA (m) Lentiviral Particles: sc-145725-V.

Molecular Weight of GPR177: 48 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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.