GPR123 (T-16): sc-162892



The Power to Question

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. GPR123 (G protein-coupled receptor 123) is a 1,279 amino acid multi-pass membrane protein belonging to the G protein-coupled receptor 2 family and LN-TM7 subfamily. Existing as two alternatively spliced isoforms, GPR123 functions as an orphan receptor that is expressed in adult and fetal brain, and in adult spinal cord. The gene encoding GPR123 maps to human chromosome 10q26.3 and mouse chromosome 7 F4.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPR123 (human) mapping to 10q26.3; Gpr123 (mouse) mapping to 7 F4.

SOURCE

GPR123 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GPR123 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162892 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR123 (T-16) is recommended for detection of GPR123 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); non cross-reactive with other GPR family members.

Suitable for use as control antibody for GPR123 siRNA (h): sc-90342, GPR123 siRNA (m): sc-145699, GPR123 shRNA Plasmid (h): sc-90342-SH, GPR123 shRNA Plasmid (m): sc-145699-SH, GPR123 shRNA (h) Lentiviral Particles: sc-90342-V and GPR123 shRNA (m) Lentiviral Particles: sc-145699-V.

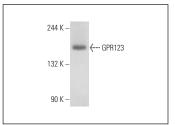
Molecular Weight of GPR123: 137 kDa.

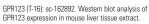
Positive Controls: mouse liver extract : sc-2256, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

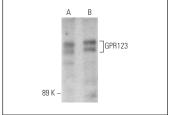
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA







GPR123 (T-16): sc-162892. Western blot analysis of GPR123 expression in mouse brain (**A**) and rat brain (**B**) tissue extracts

RESEARCH USE

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