

GHRH-R (N-16): sc-54203

BACKGROUND

GHRH-R (growth hormone-releasing hormone receptor) is a seven transmembrane domain protein that localizes to the somatotroph of the pituitary. GHRH-R plays an important role in growth and acts as a high-affinity receptor for GHRH. Binding of GHRH leads to the coupling of GHRH-R to G-protein which stimulates increased adenylyl cyclase activity and the accumulation of cAMP leading to the synthesis and release of growth hormone and somatotroph proliferation. In addition, this signaling pathway may have direct action in fetal/placental development, reproduction and immune function. GHRH and GHRH-R may also play a role in the regulation of non-rapid eye movement sleep (NREMS). The expression of GHRH-R is dependent on the presence of the POU domain factor Pit-1. Mutations in the gene encoding this protein can result in isolated growth hormone deficiency (IGHD), also known as Dwarfism of Sindh, and anterior pituitary hypoplasia (APH).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GHRHR (human) mapping to 7p14.3.

RESEARCH USE

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

SOURCE

GHRH-R (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of GHRH-R 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-54203 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GHRH-R (N-16) is recommended for detection of GHRH receptor of 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).

GHRH-R (N-16) is also recommended for detection of GHRH receptor in additional species, including equine and canine.

Suitable for use as control antibody for GHRH-R siRNA (h): sc-72353, GHRH-R shRNA Plasmid (h): sc-72353-SH and GHRH-R shRNA (h) Lentiviral Particles: sc-72353-V.

Molecular Weight of GHRH-R: 55 kDa.

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.

STORAGE

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

PROTOCOLS

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