GnRHR (N-20): sc-8682



The Power to Question

BACKGROUND

Gonadotropin-releasing hormone (GnRH) is released in a pulsatile manner that varies with the reproductive cycle. This hypothalamic hormone is transported to the pituitary, where it binds to specific receptors and regulates the synthesis and release of luteinizing hormone (LH) and follicle-stimulating hormone (FSH). The GnRH receptor (GnRHR), like most G protein-coupled receptors, contains a seven transmembrane domain. However, unlike most G protein-coupled receptors, the GnRHR lacks an intracellular C-terminal domain. The GnRHR gene is thought to be regulated by GnRH and activin A, and has been shown to undergo alternative splicing.

CHROMOSOMAL LOCATION

Genetic locus: GNRHR (human) mapping to 4q13.2; Gnrhr (mouse) mapping to 5 E1.

SOURCE

GnRHR (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GnRHR of human origin.

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-8682 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.

PROTOCOLS

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

APPLICATIONS

GnRHR (N-20) is recommended for detection of GnRHR 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GnRHR (N-20) is also recommended for detection of GnRHR in additional species, including canine and porcine.

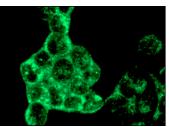
Suitable for use as control antibody for GnRHR siRNA (h): sc-40012, GnRHR siRNA (m): sc-40013, GnRHR shRNA Plasmid (h): sc-40012-SH, GnRHR shRNA Plasmid (m): sc-40013-SH, GnRHR shRNA (h) Lentiviral Particles: sc-40012-V and GnRHR shRNA (m) Lentiviral Particles: sc-40013-V.

Molecular Weight of GnRHR: 68 kDa.

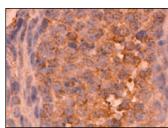
RECOMMENDED SECONDARY REAGENTS

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



GnRHR (N-20): sc-8682. Immunofluorescence staining of methanol-fixed T-47D cells showing membrane localization.



GnRHR (N-20): sc-8682. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse ovary tissue showing membrane localization.

SELECT PRODUCT CITATIONS

- Mo, Y., et al. 2010. Regulation of gonadotropin-releasing hormone (GnRH) receptor-I expression in the pituitary and ovary by a GnRH agonist and antagonist. Reprod. Sci. 17: 68-77.
- Lee, H.J., et al. 2010. Role of GnRH-GnRH receptor signaling at the maternal-fetal interface. Fertil. Steril. 94: 2680-2687.
- Guo, H., et al. 2011. A novel indium-111-labeled gonadotropin-releasing hormone peptide for human prostate cancer imaging. Bioorg. Med. Chem. Lett. 21: 5184-5187.
- Guo, H., et al. 2011. Synthesis and evaluation of novel gonadotropinreleasing hormone receptor-targeting peptides. Bioconjug. Chem. 22: 1682-1689.

RESEARCH USE

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



Try **GnRHR (GRX-8): sc-69847**, our highly recommended monoclonal alternative to GnRHR (N-20).

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