

GnRHR (FL-328): sc-13944

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.

REFERENCES

1. Tsutsumi, M., et al. 1992. Cloning and functional expression of a mouse gonadotropin-releasing hormone receptor. *Mol. Endocrinol.* 6: 1163-1169.
2. Chi, L., et al. 1993. Cloning and characterization of the human GnRH receptor. *Mol. Cell Endocrinol.* 91: R1-R6.
3. Zhou, W. and Sealfon, S.C. 1994. Structure of the mouse gonadotropin-releasing hormone receptor gene: variant transcripts generated by alternative processing. *DNA Cell Biol.* 13: 605-614.
4. Kaiser, U.B., et al. 1995. A mechanism for the differential regulation of gonadotropin subunit gene expression by gonadotropin-releasing hormone. *Proc. Natl. Acad. Sci. USA* 92: 12280-12284.

CHROMOSOMAL LOCATION

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

SOURCE

GnRHR (FL-328) is a rabbit polyclonal antibody raised against amino acids 1-328 representing full length GnRHR 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.

APPLICATIONS

GnRHR (FL-328) 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), 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).

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.

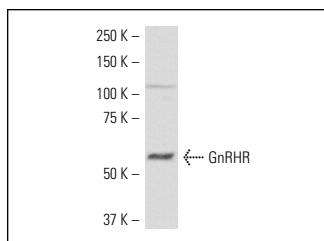
Molecular Weight of GnRHR: 68 kDa.

Positive Controls: AtT-20/D16vF2 whole cell lysate: sc-364367.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GnRHR (FL-328): sc-13944. Western blot analysis of GnRHR expression in AtT-20/D16vF2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Siejka, A., et al. 2010. Mechanisms of inhibition of human benign prostatic hyperplasia *in vitro* by the luteinizing hormone-releasing hormone antagonist cetrorelix. *BJU Int.* 106: 1382-1388.
2. Britten, J.L., et al. 2012. Gonadotropin-releasing hormone (GnRH) agonist leuprolide acetate and GnRH antagonist cetrorelix acetate directly inhibit leiomyoma extracellular matrix production. *Fertil. Steril.* 98: 1299-1307.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **GnRHR (GRX-8): sc-69847**, our highly recommended monoclonal alternative to GnRHR (FL-328).