FSHβ (C-19): sc-7797



The Power to Question

BACKGROUND

Follicle-stimulating hormone (FSH), also called follitropin, belongs to the family of glycoprotein hormones that also includes luteininizing hormone and thyroid-stimulating hormone. These hormones are secreted by the pituitary and exist as heterodimers, consisting of a common α subunit and a homologous but distinct β subunit. While the α subunit of FSH is involved in the binding of FSH to the receptor, follicle-stimulating hormone receptor (FSHR), the β subunit stabilizes this interaction. This heterodimer regulates a variety of processes, including secretion, post-translational modification and signal transduction. Both FSH and FSHR are localized to Sertoli cells.

REFERENCES

- Dias, J.A. 1996. Human follitropin heterodimerization and receptor binding structural motifs: identification and analysis by a combination of synthetic peptide and mutagenesis approaches. Mol. Cell. Endocrinol. 125: 45-54.
- 2. Sugahara, T., et al. 1996. Expression of biologically active fusion genes encoding the common α subunit and either the CG β or FSH β subunits: role of a linker sequence. Mol. Cell. Endocrinol. 125: 71-77.

CHROMOSOMAL LOCATION

Genetic locus: FSHB (human) mapping to 11p14.1; Fshb (mouse) mapping to 2 E3.

SOURCE

FSH β (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FSH β 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-7797 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FSH β (C-19) is recommended for detection of FSH β 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).

FSH β (C-19) is also recommended for detection of FSH β in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FSH β siRNA (h): sc-39315, FSH β siRNA (m): sc-39316, FSH β shRNA Plasmid (h): sc-39315-SH, FSH β shRNA (h) Lentiviral Particles: sc-39315-V and FSH β shRNA (m) Lentiviral Particles: sc-39316-V.

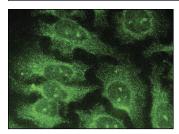
Molecular Weight of glycosylated FSHβ: 24 kDa.

Molecular Weight of nonglycosylated FSHβ: 21 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) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FSHβ (C-19): sc-7797. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Kubosaki, A., et al. 2006. Disruption of the transmembrane dense core vesicle proteins IA-2 and IA-2β causes female infertility. Endocrinology 147: 811-815.
- Kim, M.O., et al. 2007. Ectopic expression of tethered human folliclestimulating hormone (hFSH) gene in transgenic mice. Transgenic Res. 16: 65-75.
- 3. Jeong, K.H., et al. 2009. Expression of a gonadotropin-releasing hormone receptor-simian virus 40 T-antigen transgene has sex-specific effects on the reproductive axis. Endocrinology 150: 3383-3391.
- Chilvers, R.A., et al. 2012. Development of a novel protocol for isolation and purification of human granulosa cells. J. Assist. Reprod. Genet. 29: 547-556.

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.



Try FSH β (C-12): sc-374452 or FSH β (F2): sc-66127, our highly recommended monoclonal aternatives to FSH β (C-19).