FSHβ (H-82): sc-292422



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.
- 3. Stanton, P.G., et al. 1996. Structural and functional characterisation of hFSH and hLH isoforms. Mol. Cell Endocrinol. 125: 133-141.
- 4. Arnold, C.J., et al. 1998. The human follitropin α -subunit C terminus collaborates with a β -subunit cystine noose and an α -subunit loop to assemble a receptor-binding domain competent for signal transduction. Biochemistry 37: 1762-1768.
- Baccetti, B., et al. 1998. Localization of human follicle-stimulating hormone in the testis. FASEB J.12: 1045-1054.
- Beau, I., et al. 1998. The basolateral localization signal of the folliclestimulating hormone receptor. J. Biol. Chem. 273: 18610-18616.

CHROMOSOMAL LOCATION

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

SOURCE

FSH β (H-82) is a rabbit polyclonal antibody raised against amino acids 48-129 mapping at 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.

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

FSH β (H-82) 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), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

FSH β (H-82) is also recommended for detection of FSH β in additional species, including equine, canine, bovine and porcine.

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 Plasmid (m): sc-39316-SH, FSH β shRNA (h) Lentiviral Particles: sc-39315-V and FSH β shRNA (m) Lentiviral Particles: sc-39316-V.

Molecular Weight of nonglycosylated FSHβ: 21 kDa.

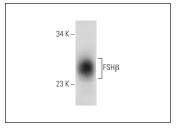
Molecular Weight of glycosylated FSHβ: 24 kDa.

Positive Controls: rat pituitary gland extract: sc-364807.

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



 $\text{FSH}\beta$ (H-82): sc-292422. Western blot analysis of $\text{FSH}\beta$ expression in rat pituitary tissue extract.

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 (H-82).