

Product Specification Sheet

**Anti-Human Follicle stimulating hormone (FSH) Antibody**

**Cat #** FSH11-M  
3

Mouse Monoclonal Anti-Human Follicle stimulating hormone IgG, aff pure

**SIZE:** 100 ug

FSH and human luteinizing hormone (LH) are glycoprotein hormones with mol. wt. Of approx. 30 kDa. Each hormone is composed of 2 polypeptide chains, alpha and beta subunits. LH, FHS, TSH, and HCG share the same alpha subunits. The beta subunit structure differs among these hormones and determines specificity and biological action.

FSH and LH are secreted by the basophilic cells of the anterior pituitary in response to the Gonadotropin-releasing hormone (GnRH) produced by the hypothalamus. In both males and females, FSH and LH control the development and maintenance of the gonadal tissue, which synthesize and secrete steroid hormones. In females, FSH controls the developing ovarian follicles and, in males, FSH maintaining spermatogenesis in the testes with the aid of LH and testosterone. LH promotes secretion of estrogen and progesterone by the ovary and of testosterone by the testes. LH also triggers ovulation. These steroid hormones control the circulating levels of LH and FSH by a negative feedback effects on the hypothalamus. The roles of FSH and LH are thus interrelated and mutually potentiating and for this reason are routinely performed concurrently in the differential diagnosis of hypothalamic, pituitary or gonadal dysfunction. Additionally, the hormone levels are used to assess the menstrual cycle for ovulation timing and monitoring of ovulation induction, determination of menopause and for monitoring endocrine therapy.

**Source of Antigen and Antibodies**

Purified human FSH was injected into Balb/c mice to produced mouse monoclonal antibodies. A clone producing IgG2a anti-TSH was expanded as ascites (cat # FSH11-M).

Affinity constant

$3 \times 10^{10}$  L/mol

**Recommended Secondary Antibodies:** **Goat Anti-mouse IgG-HRP conjugate** Cat # 40320 (AP, biotin, FITC conjugates also available).

**Form & Storage**

**IgG**

100ul  
solution lyophilized powder  
Buffer: PBS contains 0.05% sodium azide  
**Reconstitute powder** 100 ul of PBS

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

**Specificity and crossreactivity**

Anti-FSH Mab #FSH11-M recognizes human TSH and no reactivity with other peptides hormones such (HCG, LH, FSH etc. Antibodies crossreactivity with FSH from other species (mouse, rat etc) have not been studies. The specificity of FSH antibodies was also tested in ELIA kit by measuring interference from high concentrations of hLH (up to 200 mIU/ml), hTSH (up to 50 uIU/ml), and HCG (up to 10000 mIU/ml). These hormones had a minimal interference in the FSH assay (0.01% or less)

**Recommended Usage**

**ELISA**

Suitable for coating or tracer. Matching pair cat# FSH12-M.

**Western Blotting** (1:1K-5K) using Chemiluminescence substrates.

**Histochemistry & Immunofluorescence:** We recommend using perfusion-fixed rat brain (4% paraformaldehyde, 0.2% glutaraldehyde) tissues. We recommend an initial testing at 5-10 ug/ml. Users must optimize antibody dilution based upon their specific requirement.

**General References:**

Fan QR (2005) Nature 433, 269-277; Glaser T (1986) Nature 321, 882; Layman LC (1997) *Eng. J. Med.* 337: 607-611; Walton WJ (2001) *J. Clin. Endocr. Metab.* 86: 3675

\*This product is for In vitro research use only.

**Related material available from ADI**

**LH, FSH, TSH, HCG ELISA kits**

Antibodies to **LH, FSH, TSH, HCG ELISA**  
FSH11-M 90602A

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