

Follicle Stimulating Hormone ELISA Kit | FSH elisa kit

Follicle Stimulating Hormone (FSH)

CATALOG #
AAA77864

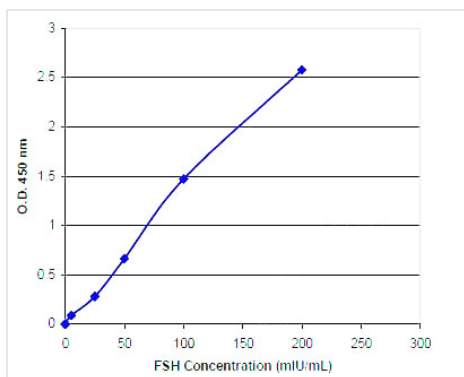
PRODUCT SYNONYMS

Follicle Stimulating Hormone; Follicle Stimulating Hormone (FSH); FSH elisa kit

PRODUCT SPECIFICATIONS

Specificity	This kit exhibits no detectable cross-reaction with LH, HCG, TSH, and Prolactin. hGH can be detected in this assay.
Sequence Length	129
Samples	Serum
Assay Type	Quantitative Sandwich
Sensitivity	~1.5 mIU/mL

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for FSH elisa kit	Intended Uses: This Human FSH ELISA Kit is to be used for the in vitro quantitative determination of human follicle stimulating hormone (FSH) concentrations in serum. This kit is intended FOR LABORATORY RESEARCH USE ONLY. Principle of the Assay: This FSH enzyme linked immunosorbent assay (ELISA) applies a technique called a quantitative sandwich immunoassay. The microtiter plate provided in this kit has been precoated with a monoclonal antibody specific for FSH. Standards or samples are then added to the microtiter plate wells and FSH if present, will bind to the antibody pre-coated on the wells. In order to quantitate the amount of FSH present in the sample, a standardized preparation of horseradish peroxidase (HRP) conjugated monoclonal antibody specific for FSH is added to each well to "sandwich" the FSH immobilized on the plate. The microtiter plate undergoes incubation, and then the wells are thoroughly washed to remove all unbound components. Next, a TMB (3,3',5,5' Tetramethyl-benzidine) substrate solution is added to each well. This enzyme (HRP) and substrate are allowed to react over a short incubation period. Only those wells that contain FSH and enzyme-conjugated antibody will exhibit a change in colour. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the colour change is measured spectrophotometrically at a wavelength of 450 nm. In order to measure the concentration of FSH in the sample this Human FSH ELISA Kit includes a set of calibration standards (6 standards). The calibration standards are assayed at the same time as the samples and allow the operator to produce a standard curve of Optical Density (O.D.) versus FSH concentration (mIU/mL). The concentration of FSH in the samples is then determined by comparing the O.D. of the samples to the standard curve. Background/Introduction: Follicle-Stimulating Hormone (FSH) and Luteinizing Hormone (LH) are intimately involved in the control of the growth and reproductive activities of the gonadal tissues, which synthesize and secrete male and female sex hormones. The levels of circulating FSH and LH are controlled by these sex hormones through a negative feedback relationship. FSH is a glycoprotein secreted by the basophil cells of the anterior pituitary. Gonadotropin-releasing hormone (GnRH), produced in the hypothalamus, controls the release of FSH from the anterior pituitary. Like other glycoproteins, such as LH, TSH, and HCG, FSH consists of subunits designated as alpha and beta. Hormones of this type have alpha subunits that are very similar in structure; therefore the biological and immunological properties of each are dependent on the unique beta subunit. In the female, FSH stimulates the growth and maturation of ovarian follicles by acting directly on the receptors located on the granulosa cells; follicular steroidogenesis is promoted and LH production is stimulated. The LH produced then binds to the theca cells and stimulates steroidogenesis. Increased intraovarian estradiol production occurs as follicular maturation advances, thereupon stimulating increased FSH receptor activity and FSH follicular binding. FSH, LH and estradiol are therefore intimately related in supporting ovarian recruitment and maturation in women. FSH levels are elevated after menopause, castration, and in premature ovarian failure. The levels of FSH may be normalized through the administration of estrogens, which demonstrate a negative feedback mechanism. Abnormal relationships between FSH and LH and between FSH and estrogen have been linked to anorexia nervosa and polycystic ovarian disease. Although there are significant exceptions, ovarian failure is indicated when random FSH concentrations exceed 40 mIU/mL. The growth of the seminiferous tubules and maintenance of spermatogenesis in men are regulated by FSH. However, androgens, unlike estrogens, do not lower FSH levels, therefore demonstrating a feedback relationship only with serum LH. For reasons not fully understood, azospermic and oligospermic males usually have elevated FSH levels. Tumors of the testes generally depress serum FSH concentrations, but levels of LH are elevated, as determined by radioimmunoassay. It has been postulated that the apparent LH increase may be caused by cross-reactivity with hCG-like substances secreted by tumors of the testes. High levels of FSH in men may be found in primary testicular failure and Klinefelter syndrome. Elevated concentrations are also present in cases of starvation, renal failure, hyperthyroidism, and cirrhosis.
Product Categories/Family for FSH elisa kit	ELISA Kits for Human Hormones

NCBI AND UNIPROT INFORMATION

NCBI GI #	182762
NCBI GeneID	2488
Molecular Weight	14,700 Da
NCBI Official Full Name	follicle-stimulating hormone
NCBI Official Synonym Full Names	follicle stimulating hormone, beta polypeptide
NCBI Official Symbol	FSHB

NCBI Protein Information	follitropin subunit beta; FSH-B; FSH-beta; follicle-stimulating hormone beta subunit; follitropin beta chain; follitropin, beta chain
UniProt Protein Name	Follitropin subunit beta
UniProt Gene Name	FSHB
UniProt Entry Name	FSHB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/fsh-elisa-kits/follicle-stimulating-hormone/77864>