

ARG80844 Human FSH ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG80844 Human FSH ELISA Kit is an enzyme immunoassay kit for the quantification of Follicle Stimulating Hormone (FSH) in serum.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	FSH / Follicle Stimulating Hormone
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	0.856 mIU/ml
Sample Type	Serum.
Standard Range	5 - 100 mIU/ml
Sample Volume	25 µl
Alternate Names	FSH-alpha; LSH-alpha; FSHA; Thyrotropin alpha chain; LHA; CG-alpha; GPHA1; TSHA; Chorionic gonadotrophin subunit alpha; Luteinizing hormone alpha chain; TSH-alpha; Choriogonadotropin alpha chain; GPHa; CG-ALPHA; Anterior pituitary glycoprotein hormones common subunit alpha; Follitropin alpha chain; HCG; Glycoprotein hormones alpha chain; Thyroid-stimulating hormone alpha chain; Follicle-stimulating hormone alpha chain; Lutropin alpha chain

Application Instructions

Assay Time 30, 10 min

Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 1081 Human Swiss-port # P01215 Human
Gene Symbol	CGA
Gene Full Name	glycoprotein hormones, alpha polypeptide
Background	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 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 structurally, 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, 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 crossreactivity 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.

Highlight

Related products:

[FSH antibodies](#); [FSH ELISA Kits](#); [FSH Duos / Panels](#);

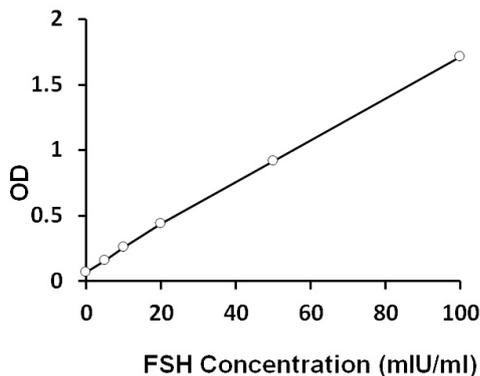
New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

Research Area

Cell Biology and Cellular Response kit; Gene Regulation kit; Signaling Transduction kit

Images



ARG80844 Human FSH ELISA Kit example of standard curve image

ARG80844 Human FSH ELISA Kit results of a typical standard run with optical density reading at 450 nm.