

TEST: FOLLICLE STIMULATING HORMONE (FSH)

PRINCIPLE:

FSH is secreted by the anterior pituitary under the control of hypothalamic gonadotrophin releasing hormone. The function of FSH in both males and females is to facilitate the development and maintenance of the gonadal tissues. These tissues synthesize and secrete steroid hormones, which in turn control FSH concentrations by negative feedback. At menopause, ovarian function and steroid secretion cease, causing FSH concentrations to rise due to a lack of negative feedback control. FSH concentrations are similarly raised in women of pre-menopausal age who suffer ovarian failure, or whose ovaries failed to mature during puberty. Elevated FSH concentrations are found in males when the testes have failed to develop to functional maturity, or, in cases of infertility due to primary testicular failure.

SPECIMEN REQUIREMENTS:

2ml collected in a serum separator tube (gel barrier). Separate serum from cells ASAP or within 2 hours of collection by centrifugation. Stability after separation from cells: Ambient: 8 Hours; Refrigerated: 48 Hours; Frozen: 1 year (avoid repeated freeze/thaw cycles).

REJECTION CRITERIA:

Plasma or other body fluids. Gross hemolysis

METHOD:

Enhanced Chemiluminescence.

REFERNCES:

- 1. Short, RV. The Control of Menstruation. Br J Hosp Med. 7:552-555; 1972.
- 2. Hillier SG. Current Concepts of the Roles of Follicle-Stimulating and Luteinizing Hormone in Folliculogenesis. Human Reproduction. 9:188-191; 1994.
- 3. Ahmed Ebbiary NA, et al. The significance of Elevated Basal Follicle-Stimulating-Hormone In Regularly Menstruating Infertile Women. Human Reproduction. 9: 245-252; 1994.

Normal Range:

Normal Female Mid Follicular phase: 3.85-8.78 mIU/ml
Normal Female Mid Cycle Peak: 4.54-22.51 mIU/ml
Normal Female Mid Luteal Phase: 1.79-5.12 mIU/ml
Postmenopausal Female: 21.5-131 mIU/ml
Normal Male 1.27-19.26 mIU/ml

Turnaround Time: 3 business days