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 Chairman & Consultant Pathologist

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<b>NAME</b>	: Mrs. KAMIYA	<b>PATIENT ID</b>	: 1626962
<b>AGE/ GENDER</b>	: 37 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012409270049
<b>COLLECTED BY</b>	: SURJESH	<b>REGISTRATION DATE</b>	: 27/Sep/2024 01:03 PM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 27/Sep/2024 01:05PM
<b>BARCODE NO.</b>	: 01517825	<b>REPORTING DATE</b>	: 27/Sep/2024 02:52PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
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## ENDOCRINOLOGY

### LUTEINISING HORMONE (LH)

LUTEINISING HORMONE (LH): SERUM	4.83	mIU/mL	MALES: 0.57 - 12.07 FOLLICULAR PHASE: 1.80 - 11.78 MID-CYCLE PEAK: 7.59 - 89.08 LUTEAL PHASE: 0.56 - 14.0 POST MENOPAUSAL WITHOUT HRT: 5.16 - 61.99
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#### INTERPRETATION:

1. Luteinizing hormone (LH) is a glycoprotein hormone consisting of 2 non covalently bound subunits (alpha and beta). Gonadotropin-releasing hormone from the hypothalamus controls the secretion of the gonadotropins, FSH and LH, from the anterior pituitary.
2. In both males and females, LH is essential for reproduction. In females, the menstrual cycle is divided by a mid cycle surge of both LH and FSH into a follicular phase and a luteal phase.
3. This "LH surge" triggers ovulation thereby not only releasing the egg, but also initiating the conversion of the residual follicle into a corpus luteum that, in turn, produces progesterone to prepare the endometrium for a possible implantation.
4. LH supports thecal cells in the ovary that provide androgens and hormonal precursors for estradiol production. LH in males acts on testicular interstitial cells of Leydig to cause increased synthesis of testosterone.

#### The test is useful in the following situations:

1. An adjunct in the evaluation of menstrual irregularities.
2. Evaluating patients with suspected hypogonadism
3. Predicting ovulation & Evaluating infertility
4. Diagnosing pituitary disorders
5. In both males and females, primary hypogonadism results in an elevation of basal follicle-stimulating hormone and luteinizing hormone levels.

#### FSH AND LH ELEVATED IN:

1. Primary gonadal failure
2. Complete testicular feminization syndrome
3. Precocious puberty (either idiopathic or secondary to a central nervous system lesion)
4. Menopause
5. Primary ovarian hypo dysfunction in females
6. Polycystic ovary disease in females
7. Primary hypogonadism in males

#### LH IS DECREASED IN:

1. Primary ovarian hyper function in females
2. Primary hypergonadism in males

#### NOTE

1. FSH and LH are both decreased in failure of the pituitary or hypothalamus.





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### FOLLICLE STIMULATING HORMONE (FSH)

FOLLICLE STIMULATING HORMONE (FSH): SERUM by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)	10.72	mIU/mL	FEMALE FOLLICULAR PHASE: 3.03 - 8.08 FEMALE MID-CYCLE PEAK: 2.55 - 16.69 FEMALE LUTEAL PHASE: 1.38 - 5.47 FEMALE POST-MENOPAUSAL: 26.72 - 133.41 MALE: 0.95 - 11.95
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#### INTERPRETATION:

- Gonadotropin-releasing hormone from the hypothalamus controls the secretion of the gonadotropins, follicle-stimulating hormone (FSH) and luteinizing hormone (LH) from the anterior pituitary.
- The menstrual cycle is divided by a midcycle surge of both FSH and LH into a follicular phase and a luteal phase.
- FSH appears to control gametogenesis in both males and females.

#### The test is useful in the following settings:

- An adjunct in the evaluation of menstrual irregularities.
- Evaluating patients with suspected hypogonadism.
- Predicting ovulation
- Evaluating infertility
- Diagnosing pituitary disorders
- In both males and females, primary hypogonadism results in an elevation of basal follicle-stimulating hormone (FSH) and luteinizing hormone (LH) levels.

#### FSH and LH LEVELS ELEVATED IN:

- Primary gonadal failure
- Complete testicular feminization syndrome.
- Precocious puberty (either idiopathic or secondary to a central nervous system lesion)
- Menopause (postmenopausal FSH levels are generally >40 IU/L)
- Primary ovarian hypofunction in females
- Primary hypogonadism in males

#### NOTE:

- Normal or decreased FSH is seen in polycystic ovarian disease in females
- FSH and LH are both decreased in failure of the pituitary or hypothalamus.

\*\*\* End Of Report \*\*\*





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