

Gonadotrophins (LH/FSH)

Synonyms

Luteinising Hormone (LH) and Follicle Stimulating Hormone (FSH)

Clinical Indication

LH and FSH are anterior pituitary hormones which regulate male and female gonadal function. Measurement of LH/FSH can be useful in suspected disorders of gonadal function.

Indicated in the investigation of suspected hypothalamic, pituitary or gonadal dysfunction. Please refer to guidelines on appropriate investigations for women with secondary amenorrhoea and/or menopausal symptoms.

Part of Profile / See Also

LH / FSH

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

On request

Turnaround Time

Same day (Monday to Friday)

Patient Preparation

None required. If patient is having menstrual cycles, collect between days 1 to 5 of cycle.

Sample Requirements

Specimen Type

Serum

Volume

1 ml

Container



Yellow top (SST) tube



Or Paediatric green top (lithium-heparin)



Or Paediatric orange top (lithium heparin)

Reference Range & Units

In women, dependent on stage of menstrual cycle; in the early follicular phase, and in men, levels of LH and FSH are usually < 10 U/L.

	LH (mu/L)	FSH (mu/L)
Males	1.2 – 8.6	1.3 – 19.3
Mid-follicular phase	2.1 – 10.9	3.9 – 8.8
Mid-cycle Peak	19.2 – 103.0	4.5 – 22.5
Mid-luteal phase	1.2 – 12.9	1.8 – 5.1
Post-menopausal females	10.9 – 58.6	16.7 – 113.6

Interferences

Interpretation & Clinical

Low LH/FSH: pituitary / hypothalamic disease.

Decision Value (if applicable)

High gonadotrophins: primary gonadal failure (LH and FSH), azoospermia / ovulatory failure (FSH), polycystic ovary syndrome (LH>FSH).

Towards the menopause, FSH tends to rise before LH, although both show considerable variation. After the menopause, levels of both FSH and LH are greatly elevated (greater than 28 U/L).

References

Test code

LH and FSH

Lab Handling

Analysed from primary tube and stored at 4°C



7880

Accredited to
ISO 15189:2022