

LH

Acceptable Tube Type



Alternate Name:	Luteinizing Hormone	
Performing Lab:	New Hanover	
Specimen Container:	Yellow serum separator tube, green top tube (lithium heparin), or a red top tube.	
Minimum Volume Required:	1.0 mL	
Testing Availability	Routine:	24 hours/day
	Stat:	Yes
Turnaround Time:	Routine:	4 hours
	Stat:	<1 hour
Special Handling:	None	
Patient Preparation:	None	
Specimen Stability:	24 hours at room temp, 7 days at 2-8C, or 14 days frozen.	

Reference Range:

Normally menstruating females:

Follicular phase	1.9 – 12.8 mIU/mL
Midcycle peak	22.8 – 76.1 mIU/mL
Luteal phase	0.6 – 13.5 mIU/mL

Post-menopausal on MHT: 1.1–52.4 mIU/mL

Post-menopausal not on MHT: 8.6 – 61.8 mIU/mL

Males: 1.2 – 10.6 mIU/mL

Critical Value:	None
CPT Code:	83002
Testing Methodology:	Homogeneous, sandwich chemiluminescent immunoassay based on LOCI technology.
Causes for Specimen Rejection:	Improper labeling
Other Comments:	
Clinical Significance:	<p>LH is also known as interstitial cell stimulating hormone (ICSH) in males. In both males and females, LH secretion is required for normal sexual function and is regulated by the interplay of positive and negative feedback mechanisms involving hormone secretions of the anterior pituitary, hypothalamus, and gonads.</p> <p>LH secretion occurs in pulses with rapid, wide fluctuations. For that reason, samples obtained from the same patient within a single day can vary widely.</p> <p>Elevated LH and FSH levels may indicate primary ovarian or testicular failure. Menopause and polycystic ovary disease in females may also cause high FSH levels.</p> <p>Low FSH and LH levels indicate either pituitary deficiency or suppression from hypergonadism in both sexes.</p>