TEST: PROLACTIN

PRINCIPLE:
Prolactin is released from the anterior pituitary under the inhibitory control of dopamine, which is secreted from the hypothalamus. When isolated from pituitary tissue, blood or amniotic fluid, prolactin has been found to exist in a number of molecular weight forms and has some structural similarities with human growth hormone. Prolactin plays a major role in the initiation and maintenance of lactation, where there is a physiological elevation of circulating concentrations. Pathological hyperprolactinemia occurs in hypothyroidism and renal failure. Hyperprolactinemia is also known to impair gonadal function in both sexes. Women may present with amenorrhea while men may suffer from impotence.

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.

REFERENCES:
1. Frantz AG. Physiology in Medicine: Prolactin. *New Eng J Biol Sci*. 298: 201-207; 1978
2. Falconer IR. Aspects of Biochemistry, Physiology and Endocrinology Lactation. *Aust J Biol Sci*. 33: 71-84;1983
3. Rees LH. Prolactin-Recent Advances in Clinical Biochemistry. In Albert KG, Price P (eds). *Recent Advances in Clinical Biochemistry*. 153-167; 1981.

Normal Range:
Female Premenopausal (<50 years of age): 3.34-26.72 ng/ml
Female Postmenopausal (=>50 years of age): 2.74-19.64 ng/ml
Male: 2.64-13.13 ng/ml

Turnaround time: 3 business days