



## Serum Luteinizing Hormone

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**Type of Hormone:** Protein

**Purpose of Test:**

To determine serum concentration of LH in order to obtain information about reproductive function. Reasons to perform a LH test vary with the species and include:

- ❖ checking for neuter/spay status
- ❖ determining likelihood of ovulation
- ❖ aid in diagnosis of reproductive disorders

**Description of test and procedures:**

The test is a radioimmunoassay performed with in-house reagents. The radioimmunoassay technique is based on the competitive binding of the serum LH and a radiolabeled LH preparation. They compete for binding to an antibody specific for LH. The antibody-bound radiolabeled LH is separated and the quantity is determined by counting in a gamma spectrometer. Results for the unknown are read from a curve prepared by plotting results for a set of known standards. Sera with pre-determined concentrations are included in the assay for quality control purposes.

**Sample Needed and Procedures for Submittal:**

Submit at least 1mL of serum on a cold pack. *It may be possible to perform this analysis with less serum, but laboratory approval is required.*

**Schedule For Running Test:**

Assay preparation begins Wednesday morning and results are reported the following Monday afternoon.

**Interpretation of Results:**

Please refer to [Reference Values](#). Out of the norm results should be interpreted by a veterinary clinician or researcher familiar with reproductive function in the species being tested. In general, castrated animals have a high level of LH, and intact animals have a low level. However, there can be a borderline area where the normal values overlap. In this situation, there are other tests that can be run (testosterone with or without hCG stimulation) depending on the situation. In intact females, a LH peak or surge occurs just before ovulation, after which, the LH level returns to baseline values.

Please note: Drug treatment can suppress serum LH. Therefore, low LH values should be interpreted with caution.