



Serum Testosterone

Type of Hormone: **Steroid**
Extraction procedure required

Purpose of Test:

To determine serum concentration of testosterone to obtain information about reproductive function. This test will determine the presence of testicular tissue and its level of function.

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 testosterone and a radiolabeled testosterone preparation. They compete for binding to an antibody specific for testosterone. The antibody-bound radiolabeled testosterone 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 every 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 Thursday 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. A baseline testosterone by itself is usually sufficient to determine the animal's reproductive status (i.e. gelding, stallion, cryptorchid). Testosterone and luteinizing hormone (LH) together can definitely determine it. In borderline cases, an hCG stimulation test can be done to determine the presence of testicular tissue. The adrenal gland can occasionally produce enough testosterone to elevate the serum level, but it is not stimulated by hCG.