

Neuter Status or Cryptorchid testing (canine)

Indications

Differentiation between bilateral cryptorchidism from previous castration (e.g. rescue).
Confirmation of the presence of testicular tissue when one or both testicles cannot be located during examination or castration.

Notes

Testosterone is secreted by the testicular Leydig cells in a pulsatile way with a diurnal variation (usually lower in the morning). At its lowest, the testosterone concentration of intact dogs and cats can overlap with the concentration of neutered animals and this is the reason why stimulation protocols used to be suggested (RIG test).

In males, anti-Müllerian hormone (AMH) is produced exclusively by the testicular Sertoli cells. In a few studies, AMH showed to be very sensitive and specific to differentiate intact from neutered male dogs and cats and some studies showed that cryptorchid dogs appear to have concentrations of AMH even higher than intact males.

To investigate a patient for potential cryptorchidism, we recommend starting with a single serum sample for either **Anti-Müllerian Hormone (AMH)** or **Testosterone (TEST)**.

Sampling

- Collect a blood sample (1-2 ml of blood in plain/gel tube).
- Ensure the sample has clotted and centrifuge the samples 30-120 minutes after collection.
- For samples collected in plain tubes, please separate the serum into another plain tube (this step is not necessary for samples collected in gel tubes).
- Please label the tube with the patient's details and include the patient history, including drug history, on the request form.
- Submit the sample for either **Anti-Müllerian Hormone (AMH)** or **Testosterone (TEST)**.

