

# Testosterone

## General:

Testosterone in serum is the most important laboratory marker in the diagnosis of testicular malfunction or in androgen-caused insufficiency of the ovaries. Testosterone in blood is bound to the sexual hormone binding globulin (SHBG). When interpreting testosterone concentrations, daily fluctuations and short-term oscillations should be considered (due to physical activity, diseases, stress, medication etc.).

Testosterone in women originates from the suprarenal gland and from the ovaries, respectively. The remaining part is produced in subcutaneous fat, in skin and in the liver by prehormones or precursors. Androstendione is the most important precursor for dihydrotestosterone, which presents the effective form of testosterone.

The following tests are available:

- **Testosterone, total**

Material: 1 ml serum

Stability: 7 days at 2 to 8°C

TAT: same day, FML

Method: ECLIA

Units: ng/ml

Ref.- range: see report

Note: Decrease to approx. 50% of the basic value after dexamethasone test (dexamethasone inhibition test, suspicion of adrenal tumor with increased basic testosterone value).

If the patient is taking multivitamins or dietary supplements containing high dose of Biotin (> 5 mg), the patient should stop taking it for at least 24 hours , before having the blood collection

- **free Testosterone / free Androgen Index**

Material: 1 ml serum

Stability: 7 days at 2 to 8°C

TAT: same day, FML

Method: Calculation

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit

<http://www.fml-dubai.com/parameter-listings/>