
Lab Dept: Chemistry

Test Name: TESTOSTERONE, TOTAL

General Information

Lab Order Codes: TEST

Synonyms: Testosterone level

CPT Codes: 84403 – Testosterone; total

Test Includes: Total testosterone reported in ng/dL.

Logistics

Test Indications: Useful for assessing LH secretion and Leydig cell function; evaluating gonadal and adrenal function. For pediatrics, it assists in the detection of hypogonadism in males, pituitary or hypothalamic disease, adrenal hyperplasia, and virilizing tumors of the adrenal gland or ovaries in females.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Esoterix, Inc. (ESL Test: 500286)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 5 - 7 days, set up Monday - Saturday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red)

Draw Volume: 2.4 mL (Minimum: 1.2 mL) blood

Processed Volume: 0.8 mL (Minimum: 0.4 mL) serum

Note: Minimum volume does not permit repeat analysis

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen within one hour of collection. Remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Specimen not separated within 1 hour of draw; mislabeled or unlabeled specimens

Interpretive

Reference Range:

Premature Infants:

Age	Males	Females		
26-28 weeks, day 4	59 - 125 ng/dL	5 - 16 ng/dL		
31-35 weeks, day 4	37 - 198 ng/dL	5 - 22 ng/dL		
Infants: Full Term Newborns				
Males*	75 - 400 ng/dL			
Females**	20 - 64 ng/dL			
Infants: 1 - 7 months				
*Males: Levels decrease rapidly the first week to 20 - 50 ng/dL, then increase to 60 - 400 ng/dL between 20 - 60 days. Levels then decline to prepubertal range of <2.5 to 10 ng/dL by 7 months.				
**Females: Levels decrease during the first month to <10 ng/dL and remain there until puberty.				
Prepubertal children:				
<2.5 - 10 ng/dL				
Puberty:				
Tanner Stage	Age (Years)	Males (ng/dL)	Age (Years)	Females (ng/dL)
1	<9.8	<2.5 - 10	<9.2	<2.5 - 10
2	9.8 - 14.5	18 - 150	9.2 - 13.7	7 - 28
3	10.7 - 15.4	100 - 320	10.0 - 14.4	15 - 35
4	11.8 - 16.2	200 - 620	10.7 - 15.6	13 - 32
5	12.8 - 17.3	350 - 970	11.8 - 18.6	20 - 38
Adults:				
Males >18 years:		264 - 916 ng/dL		
Females:				

Premenopausal	10 - 55 ng/dL
Postmenopausal	7 – 40 ng/dL

Critical Values: N/A

Limitations: N/A

Methodology: (HPLC/MS-MS) High-pressure liquid chromatography/Tandem Mass Spectrometry

References: [Esoterix Laboratories](#) August 2017

Updates:
12/13/2010: Reference range updates.
8/3/2016: Tube update, volume update.
8/2/2017: Ref range update (Males >18 yrs), tube update.