

Reporting Title: Androstenedione, S
Performing Location: Mayo Clinic Laboratories - Rochester Superior Drive

Ordering Guidance:

Additional Testing Requirements:

For diagnosis and differential diagnosis of hyperandrogenism, an initial workup in adults should also include total and bioavailable testosterone (TTBS / Testosterone, Total and Bioavailable, Serum) measurements. Depending on results, this may be supplemented with measurements of sex hormone-binding globulin (SHBG1 / Sex Hormone-Binding Globulin, Serum) and other androgenic steroids (eg, dehydroepiandrosterone sulfate [DHEA-S]).

For diagnosis of congenital adrenal hyperplasia (CAH), the following assays should also be ordered:

- OHPG / 17-Hydroxyprogesterone, Serum
- DHES1 / Dehydroepiandrosterone Sulfate, Serum
- CORT / Cortisol, Serum

For monitoring CAH treatment, the following assays should also be ordered:

- TTST / Testosterone, Total, Mass Spectrometry, Serum
- OHPG / 17-Hydroxyprogesterone, Serum
- DHES1 / Dehydroepiandrosterone Sulfate, Serum
- DHEA_ / Dehydroepiandrosterone [DHEA], Serum.

For diagnosis of premature adrenarche, the following assays should also be ordered:

- FSH / Follicle-Stimulating Hormone [FSH], Serum
- LH / Luteinizing Hormone [LH], Serum
- TTBS / Testosterone, Total and Bioavailable, Serum or TGRP / Testosterone, Total and Free, Serum
- EEST / Estradiol, Serum
- DHES1 / Dehydroepiandrosterone Sulfate, Serum
- DHEA_ / Dehydroepiandrosterone (DHEA), Serum
- SHBG1 / Sex Hormone-Binding Globulin, Serum
- OHPG / 17-Hydroxyprogesterone, Serum

Specimen Requirements:

- Collection Container/Tube:** Red top (serum gel/SST are **not acceptable**)
- Submission Container/Tube:** Plastic vial
- Specimen Volume:** 0.6 mL
- Collection Instructions:** Centrifuge and aliquot serum into a plastic vial

Specimen Type	Temperature	Time	Special Container
Serum Red	Refrigerated (preferred)	28 days	
	Ambient	7 days	
	Frozen	28 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
7730	Androstenedione, S	Numeric	ng/dL	1854-9

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

82157

Reference Values:

PEDIATRICS*

Premature infants

26-28 weeks, day 4: 92-282 ng/dL

31-35 weeks, day 4: 80-446 ng/dL

Full-term infants

1-7 days: 20-290 ng/dL

1 month-1 year: <69 ng/dL

Males*

Tanner stages	Age (Years)	Reference range (ng/dL)
Stage I (prepubertal)	<9.8	<51
Stage II	9.8-14.5	31-65
Stage III	10.7-15.4	50-100
Stage IV	11.8-16.2	48-140
Stage V	12.8-17.3	65-210

Females*

Tanner stages	Age (Years)	Reference range (ng/dL)
Stage I (prepubertal)	<9.2	<51
Stage II	9.2-13.7	42-100
Stage III	10.0-14.4	80-190
Stage IV	10.7-15.6	77-225
Stage V	11.8-18.6	80-240

*Soldin SJ, Brugnara C, Wong EC, eds. Androstenedione. In: Pediatric Reference Ranges. 4th ed. AACC Press; 2003: 32-34

ADULTS

Males: 40-150 ng/dL

Females: 30-200 ng/dL

For SI unit Reference Values, see www.mayocliniclabs.com/order-tests/si-unit-conversion.html