

Overview

Method Name

High Pressure Liquid Chromatography/Tandem Mass Spectrometry (HPLC/MS-MS)

NY State Available

Yes

Specimen

Specimen Type

Serum Red

Specimen Required

Specimen Type: Serum

Container/Tube: Red

Specimen Volume: 3.5 mL

Collection Instructions: Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and separate within 45 minutes of collection and send 3.5 mL of serum frozen in plastic vial.

Specimen Minimum Volume

2 mL NOTE: Minimum volume does not allow for repeat analysis.

Reject Due To

Gross Hemolysis	Reject
Gross Lipemia	Reject
Gross Icteric	Reject
List other reasons for rejection	Gel-barrier tube, non-serum sample

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
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Serum Red	Frozen	90 days	
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Clinical & Interpretive

Reference Values

Androstenedione

Units: ng/dL

Age	Range
Premature (26-28w) Day 4	63 - 935
Premature (31-35w) Day 4	50 - 449
Full Term (1-7 days)	<10 - 279

Levels decrease rapidly to <52 ng/dL after one week.

1 - 11m	<10 - 37
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Androstenedione gradually decreases during the first six months to prepubertal levels.

Prepubertal Children	<10 - 17
Adult Males	44 - 186
Adult Females	28 - 230
Females Postmenopausal	<10-93

Cortisol

Units: ug/dL

Age	Range
Premature (26-28w) Day 4	1.0 - 11
Premature (31-35w) Day 4	2.5 - 9.1
Full Term Day 3	1.7 - 14
Full Term Day 7	2.0 - 11
31d - 11m	2.8 - 23
12m - 15y (8:00 AM)	3.0 - 21

Adults	
8:00 AM	8.0 - 19
4:00 PM	4.0 - 11

Deoxycorticosterone (DOC)

Units: ng/dL

Age	Range
Premature (26 - 28w) Day 4	20 - 105
Premature (34 - 36w) Day 4	28 - 78

Newborn: Levels are markedly elevated at birth and decrease rapidly during the first week to the range of 7 - 49 as found in older infants.

1 - 11m	7 - 49
Prepubertal Children	2 - 34
Pubertal Children and Adults	2 - 19
8:00 AM	

Dehydroepiandrosterone (DHEA)

Units: ng/dL

Age	Range
Premature (26 - 31w)	82 - 1484
Premature (32 - 35w)	56 - 1853
Full Term (2 - 7d)	41 - 1292
8d - 5m	<948
6 - 12m	<136
1 - 5 y	<68
6 - 7 y	<111
8 - 10 y	<186
11 - 12 y	<202
13 - 14 y	<319
15 - 16 y	39 - 481
17 - 19 y	40 - 491
20 - 50 y	31 - 701
> 50 y	21 - 402

11-Desoxycortisol

Units: ng/dL

Age	Range
Premature (26-28w) Day 4	110 - 1376
Premature (31-35w) Day 4	48 - 579
Newborn Day 3	13 - 147
1 - 11m	<10 - 156
Prepubertal 8:00 AM	20 - 155
Pubertal Children and Adults	12 - 158

8:00 AM

17-OH Pregnenolone

Units: ng/dL

Age	Range
Premature (26-28w) Day 4	375 - 3559
Premature (31-35w) Day 4	64 - 2380
3 Days	10 - 829
1 - 5m	36 - 763
6 - 11m	42 - 540
12 - 23m	14 - 207
24m - 5y	10 - 103
6 - 9y	10 - 186
Pubertal	44 - 235
Adults	53 - 357

Progesterone

Units: ng/dL

Males

Age	Range
1 - 16y	<10 - 15
Adults	<10 - 11

Females

Age	Range
1-10y	<10 - 26
11y	<10 - 255
12y	<10 - 856
13y	<10 - 693
14y	<10 - 1204
15y	<10 - 1076
16y	<10 -1294

Adult

Cycle Days	Range
1 - 6	<10 - 17
7 - 12	<10 - 135
13 - 15	<10 - 1563
16 - 28	<10 - 2555
Post Menopausal	<10

Note: Luteal progesterone peaked from 350 to 3750 ng/dL on days ranging from 17 to 23.

17-Alpha-Hydroxyprogesterone
17-OHP

Units: ng/dL

Age	Range
Premature (26-28w) Day 4	124 - 841
Premature (31-35w) Day 4	26 - 568
Full-Term Day 3	<78

Males: Levels increase after the first week to peak values ranging from 40 - 200 between 30 and 60 days. Values then decline to a prepubertal value of <91 before one year.

Prepubertal	<91
Adult Males	27 - 199

<u>Females</u>	
1 - 11m	13 - 106
Prepubertal	<91
<u>Adult Females</u>	
Follicular	15-70
Luteal	35-290

Testosterone, Total

Units: ng/dL

Age	Range
Males	
Premature (26-28w) Day 4	59 - 125
Premature (31-35w) Day 4	37 - 198
Newborns	75 - 400

1 - 7m: Levels decrease rapidly the first week to 20 - 50, then increase to 60 - 400 between 20 - 60 days. Levels then decline to prepubertal range levels of <2.5 - 10 by seven months.

Females	
Premature (26 - 28w) Day 4	5 - 16

Premature (31 - 35w) Day 4	5 - 22
Newborns	20 - 64

1 - 7m: Levels decrease during the first month to less than 10 and remain there until puberty.

Prepubertal Males and Females	<2.5 - 10
Adult Males >18 years	264 - 916
<u>Adult Females</u>	
Premenopausal	10 - 55
Postmenopausal	7 - 40

Males		
Tanner Stage	Age (years)	Male
1	<9.8	<2.5 - 10
2	9.8 - 14.5	18 - 150
3	10.7 - 15.4	100 - 320
4	11.8 - 16.2	200 - 620
5	12.8 - 17.3	350 - 970

Females		
Tanner Stage	Age (years)	Female
1	<9.2	<2.5 - 10
2	9.2 - 13.7	7 - 28
3	10.0 - 14.4	15 - 35
4	10.7 - 15.6	13 - 32
5	11.8 - 18.6	20 - 38

Performance

PDF Report

No

Day(s) Performed

Monday, Wednesday

Report Available

10 to 19 days

Performing Laboratory Location

Esoterix Endocrinology

Fees & Codes

Fees

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

Test Classification

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

CPT Code Information

- 82633/DOC
- 82634/ 11-Desoxycortisol
- 82157/Androstenedione
- 82533/Cortisol
- 82626/DHEA
- 84143/17-OH-Pregnenolone
- 84144/Progesterone
- 83498/17-OH-Progesterone
- 84403/Testosterone

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
FFCAH	CAH Profile 6	Not Provided

Result ID	Test Result Name	Result LOINC® Value
Z5043	Cortisol	2143-6
Z5044	Deoxycorticosterone (DOC)	1656-8
Z5045	11-Desoxycortisol	1657-6
Z5046	Dehydroepiandrosterone (DHEA)	2193-1
Z5047	17-OH Pregnenolone	6765-2
Z5048	Progesterone	2839-9
Z5049	17-Alpha-Hydroxyprogesterone 17-OHP	1668-3
Z5050	Androstenedione	1854-9
Z5051	Testosterone, Total	2986-8