MAYO CLINIC LABORATORIES

Test Definition: FFCAH

Congenital Adrenal Hyperplasia (CAH) Pediatric Profile 6, Comprehensive Screen

Overview

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

NY State Available
Yes

Specimen

Specimen Type
Serum Red

Specimen Required
Collection Container/Tube: Red top (serum gel/SST are **not acceptable**)
Submission Container/Tube: Plastic vial
Specimen Volume: 3.5 mL Serum
Collection Instructions:
1. Within 45 minutes of collection, centrifuge and aliquot serum into a plastic vial.
2. Send frozen.
Additional Information: To avoid delays in turnaround time when requesting multiple tests, **submit separate frozen specimens for each test requested**.

Specimen Minimum Volume
Serum: 2 mL Note: This volume does not allow for repeat testing.

Reject Due To

Gross hemolysis	Reject
Gross lipemia	Reject
Gross icteric	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum Red	Frozen	90 days	

Clinical & Interpretive

Clinical Information

Refer to www.labcorp.com/test-menu/

Reference Values

Androstenedione:
Premature (26-28 weeks) Day 4: 63-935 ng/dL
Premature (31-35 weeks) Day 4: 50-449 ng/dL
Full Term (1-7 days): <10-279 ng/dL
Levels decrease rapidly to <52 ng/dL after one week.
1 month-11 months: <10-37 ng/dL
Androstenedione gradually decreases during the first six months to prepubertal levels.
Prepubertal Children: <10-17 ng/dL
Adults
Males: 44-186 ng/dL
Females: 2 -230 ng/dL
Females Postmenopausal: <10-93 ng/dL

Cortisol:
Premature (26-28 weeks) Day 4: 1.0-11 ug/dL
Premature (31-35 weeks) Day 4: 2.5-9.1 ug/dL
Full Term Day 3: 1.7-14 ug/dL
Full Term Day 7: 2.0-11 ug/dL
31 days-11 months: 2.8-23 ug/dL
12 months-15 years (8 a.m.): 3.0-21 ug/dL
Adults
8 a.m.: 8.0-19 ug/dL
4 p.m.: 4.0-11 ug/dL

Deoxycorticosterone (DOC):
Premature (26-28 weeks) Day 4: 20-105 ng/dL
Premature (34-36 weeks) Day 4: 28-78 ng/dLNewborn: Levels are markedly elevated at birth and decrease rapidly during the first week to the range of 7-49 ng/dL as found in older infants.
1 month-11 months: 7-49 ng/dL
Prepubertal Children: 2-34 ng/dL
Pubertal Children and Adults 8 a.m.: 2-19 ng/dL

Dehydroepiandrosterone (DHEA):
Premature (26-31 weeks): 82-1484 ng/dL
Premature (32-35 weeks): 56-1853 ng/dL
Full Term (2-7 days): 41-1292 ng/dL
8 days-5 months: <948 ng/dL
6 months-12 months: <136 ng/dL
1 year-5 years: <68 ng/dL
6-7 years: <111 ng/dL

8-10 years: <186 ng/dL
11-12 years: <202 ng/dL
13-14 years: <319 ng/dL
15-16 years: 39-481 ng/dL
17-19 years: 40-491 ng/dL
20-50 years: 31-701 ng/dL
>50 years: 21-402 ng/dL

11-Desoxycortisol:
Premature (26-28 weeks) Day 4: 110-1376 ng/dL
Premature (31-35 weeks) Day 4: 48-579 ng/dL
Full term Newborn Day 3: 13-147 ng/dL
1 month-11 months: <10-156 ng/dL
Prepubertal 8 a.m.: 20-155 ng/dL
Pubertal Children and Adults 8 a.m.: 12-158 ng/dL

17-OH Pregnenolone:
Premature (26-28 weeks) Day 4: 375-3559 ng/dL
Premature (31-35 weeks) Day 4: 64-2380 ng/dL
3 days: 10-829 ng/dL
1 month-5 months: 36-763 ng/dL
6-11 months: 42-540 ng/dL
12-23 months: 14-207 ng/dL
24 months-5 years: 10-103 ng/dL
6-9 years: 10-186 ng/dL
Pubertal: 44-235 ng/dL
Adults: 53-357 ng/dL

Progesterone:
Males
1 year-16 years: <10-15 ng/dL
Adults: <10-11 ng/dL
Females
1 year-10 years: <10-26 ng/dL
11 years: <10-255 ng/dL
12 years: <10-856 ng/dL
13 years: <10-693 ng/dL
14 years: <10-1204 ng/dL
15 years: <10-1076 ng/dL
16 years: <10-1294 ng/dL
Adult
Cycle days
1-6: <10-17 ng/dL
7-12: <10-135 ng/dL

13-15: <10-1563 ng/dL
16-28: <10-2555 ng/dL
Post Menopausal: <10 ng/dL
Note: Luteal progesterone peaked from 350 to 3750 ng/dL on days ranging from 17 to 23.

17-Alpha-Hydroxyprogesterone (17-OHP):
Premature (26-28 weeks) Day 4: 124-841 ng/dL
Premature (31-35 weeks) Day 4: 26-568 ng/dL
Full-Term Day 3: <78 ng/dL

Males:
Levels increase after the first week to peak values ranging from 40-200 ng/dL between 30 and 60 days. Values then decline to a prepubertal value of <91 ng/dL before one year.
Prepubertal: <91 ng/dL
Adult: 27-199 ng/dL

Females:
1 month-11 months: 13-106 ng/dL
Prepubertal: <91 ng/dL
Adult:
Follicular: 15-70 ng/dL
Luteal: 35-290 ng/dL

Testosterone, Total
Males:
Premature (26-28w) Day 4: 59-125 ng/dL
Premature (31-35w) Day 4: 37-198 ng/dL
Newborns: 75-400 ng/dL
1 month-7 months: Levels decrease rapidly the first week to 20-50 ng/dL, then increase to 60-400 ng/dL between 20 and 60 days. Levels then decline to prepubertal range levels of <2.5-10 ng/dL by seven months.

Females:
Premature (26-28w) Day 4: 5-16 ng/dL
Premature (31-35w) Day 4: 5-22 ng/dL
Newborns: 20-64 ng/dL
1 month-7 months: Levels decrease during the first month to less than 10 ng/mL and remain there until puberty.

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

Males
Tanner Stage 1 <9.8 years: <2.5-10 ng/mL
Tanner Stage 2 9.8 years-14.5 years: 18-150 ng/mL
Tanner Stage 3 10.7 years-15.4 years: 100-320 ng/mL
Tanner Stage 4 11.8 years-16.2 years: 200-620 ng/mL
Tanner Stage 5 12.8 years-17.3 years: 350-970 ng/mL
Females
Tanner Stage 1 <9.2 years: <2.5-10 ng/mL
Tanner Stage 2 9.2-13.7 years: 7-28 ng/mL
Tanner Stage 3 10.0-14.4 years: 15-35 ng/mL
Tanner Stage 4 10.7-15.6 years: 13-32 ng/mL
Tanner Stage 5 11.8-18.6 years: 20-38 ng/mL

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