



# 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/](http://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/dL  
Newborn: 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

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**Males**

Tanner Stage 1 &lt;9.8 years: &lt;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 &lt;9.2 years: &lt;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