Test Definition: FPAP2

Premature Adrenarche Profile II (Androstenedione, DHEA, 17-OH-Pregnenolone, 17-Alpha-Hydroxyprogesterone, Testosterone)

Reporting Title: Premature Adrenarche Profile 2
Performing Location: Esoterix Endocrinology

Specimen Requirements:

Draw blood in a plain, red-top tube(s) or serum gel tube(s). Separate within one hour and send 2.0 mL of serum frozen in plastic vial. Specimens drawn in serum gel tube(s) must be poured off into a plastic screw cap vial before freezing.

Specimen Type	Temperature	Time
Serum	Frozen	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
Z1890	Dehydroepiandrosterone (DHEA)	Alphanumeric	ng/dL	In Process
Z1892	17-OH Pregnenolone **Also used by tests: FCAH6**	Alphanumeric	ng/dL	In Process
Z1898	17-Alpha-Hydroxyprogesterone	Alphanumeric	ng/dL	In Process
Z1899	Androstenedione **Also used by tests: FCAH1**	Alphanumeric	ng/dL	In Process
Z1905	Testosterone, Serum (Total)	Alphanumeric	ng/dL	In Process

Components:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
Billing only	Testosterone, S	1	84403		
Billing only	17-OH-Progesterone, S	1	83498		
Billing only	17-OH-Pregnenolone, S	1	84143		
Billing only	DHEA, S	1	82626		
Billing only	Androstenedione, S	1	82157		

Reference Values:

Androstenedione, Mass Spec
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

Androstenedione gradually decreases during the first six months to prepubertal levels.

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

Females

Tanner Stages	Age (years)	Range
1	<9.2	<10-17
2	9.2-13.7	<10-72
3	10.0-14.4	50-170
4	10.7-15.6	47-208
5	11.8-18.6	50-224

Males

Tanner Stages	Age (years)	Range
1	<9.8	<10-17
2	9.8-14.5	<10-33
3	10.7-15.4	17-72
4	11.8-16.2	15-115
5	12.8-17.3	33-192

Dehydroepiandrosterone (DHEA)
Units: ng/dL

Age	Range
1-5 yrs	<68
6-7 yrs	<111
8-10 yrs	<186
11-12 yrs	<202
13-14 yrs	<319
15-16 yrs	39 - 481
17-19 yrs	40 - 491
20-49 yrs	31 - 701
> or = 50 yrs	21 - 402

17-OH Pregnenolone, Mass Spec
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

17-Alpha-Hydroxyprogesterone
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 ng/dL between 30 and 60 days. Values then decline to a prepubertal value of <91 before one year.

Prepubertal	<91
Adult Males	27 - 199
Females	
(1 - 11 Months)	13 - 106
Prepubertal	<91
Adult Females	
Follicular	15 - 70
Luteal	35 - 290

Females

Tanner Stages	Age (years)	Range
1	<9.2	<83
2	9.2-13.7	11-98
3	10.0-14.4	11-155
4	10.7-15.6	18-230
5	11.8-18.6	20-265

Males

Tanner Stages	Age (years)	Range
1	<9.8	<91
2	9.8-14.5	<116
3	10.7-15.4	10-138
4	11.8-16.2	29-180
5	12.8-17.3	24-175

Testosterone, Serum (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 ng/dL
Adult Males >18 years	348 - 1197
Adult Females	
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

Test Performed By: Esoterix Endocrinology
4301 Lost Hills Road
Calabasas Hills, CA 91301