

Pregnenolone and 17-Hydroxypregnenolone, Serum #88646

USEFUL FOR:

- As an ancillary test for congenital adrenal hyperplasia, particularly in situations in which a diagnosis of 21-hydroxylase and 11-hydroxylase deficiency have been ruled out.
- Confirming a diagnosis of 3-b-hydroxydehydrogenase (3-b-HSD) deficiency and 17-alpha-hydroxylase deficiency.
- Analysis for 17-hydroxypregnenolone is also useful as part of a battery of tests to evaluate females with hirsutism or infertility. Both can result from adult-onset CAH.

METHODOLOGY: Liquid Chromatography- Tandem Mass Spectrometry (LC-MS/MS)

REFERENCE VALUES FOR 17-HYDROXYPREGNENOLONE:

Children		
	Premature (26-28 weeks)	1219-9799 ng/dL
	Premature (29-36 weeks)	346-8911 ng/dL
	Full Term (1-5 months)	229-3104 ng/dL
	6 months- 364 days	221-1981 ng/dL
	1-2 years	35-712 ng/dL
	3-6 years	< or = 276 ng/dL

	Females	Males
7-9 years	< or = 212 ng/dL	< or = 187 ng/dL
10-12 years	< or = 398 ng/dL	< or = 392 ng/dL
13-15 years	< or = 407 ng/dL	35-465 ng/dL
16-17 years	< or = 423 ng/dL	32-478 ng/dL
Tanner Stage I	< or = 235 ng/dL	< or = 208 ng/dL
Tanner Stage II	< or = 367 ng/dL	< or = 355 ng/dL
Tanner Stage III	< or = 430 ng/dL	< or = 450 ng/dL
Tanner Stage IV-V	< or = 412 ng/dL	35-478 ng/dL
> or = 18 years	31-455 ng/dL	55-455 ng/dL

REFERENCE VALUES FOR PREGNENOLONE:

	Females	Males
7-9 years	< or = 150 ng/dL	< or = 205 ng/dL
10-12 years	19-220 ng/dL	< or = 151 ng/dL
13-15 years	22-210 ng/dL	18-197 ng/dL
16-17 years	22-229 ng/dL	17-228 ng/dL
Tanner Stage I	< or = 171 ng/dL	< or = 156 ng/dL
Tanner Stage II	22-229 ng/dL	< or = 143 ng/dL
Tanner Stage III	34-215 ng/dL	< or = 214 ng/dL
Tanner Stage IV-V	26-235 ng/dL	19-201 ng/dL
> or = 18 years	33-248 ng/dL	33-248 ng/dL

SPECIMEN REQUIREMENTS: Draw blood in plain, red-top tube. Send 1.0 mL serum frozen.

NOTE: These tests will replace Esoterix test #80483, 17-OH Pregnenolone, Serum; Esoterix test #91785, Pregnenolone; and also Quest test #90189, Pregnenolone effective December 8, 2009.

CPT CODE: 84143 AND 84140

ANALYTIC TIME: 2 days

LIST FEE: \$138.50

SET UP: Wednesday 10 a.m.

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager
Jeremy Caddell, Mayo Medical Laboratories' Technical Support
Telephone: 800-533-1710

TEST DEFINITION

10/19/2009

ORDER CODE	EFF DATE	TC	TITLE	CHECKING NORMALS	PRINT NORMALS (# CODED)	PERFORM SITE *
88646 (PROFILE)			PREGNENOLONE AND	17-OH PREGNENOLONE		
88645	8/19/2009		PREGNENOLONE, S			MCR
			TRANSPORT TEMP : FROZEN			
		88645	PREGNENOLONE, S			
			UNITS: NG/DL			
			MALE			
			No AGE :		; #N88645M	
			1D TO 6Y :		; #N88645M6	
			7Y TO 9Y : 0-205		; #N88645M9	
			10Y TO 12Y : 0-151		; #N88645M12	
			13Y TO 15Y : 18-197		; #N88645M15	
			16Y TO 17Y : 17-228		; #N88645M17	
			18Y TO 150Y : 33-248		; 33-248	
			FEMALE			
			No AGE :		; #N88645F	
			1D TO 6Y :		; #N88645F6	
			7Y TO 9Y : 0-150		; #N88645F9	
			10Y TO 12Y : 19-220		; #N88645F12	
			13Y TO 15Y : 22-210		; #N88645F15	
			16Y TO 17Y : 22-229		; #N88645F17	
			18Y TO 150Y : 33-248		; 33-248	
81151	8/19/2009		17-HYDROXYPREGNENOLONE, S			MCR
			TRANSPORT TEMP : FROZEN			
		81151	17-HYDROXYPREGNENOLONE, S			
			UNITS: NG/DL			
			MALE			
ORDER CODE	EFF DATE	TC	TITLE	CHECKING NORMALS	PRINT NORMALS (# CODED)	PERFORM SITE *
88646		81151	17-HYDROXYPREGNENOLONE, S			
			No AGE :		; #N81151M	
			1D TO 5M : 229-3104		; #N81151C5	
			6M TO 11M : 221-1981		; 221-1981	

221-1981 (6 MO-364 D)
35-712 (1-2 Y)
<16-276 (3-6 Y)
<16-212 (7-9 Y)
<16-398 (10-12 Y)
<16-407 (13-15 Y)
<16-423 (16-17 Y)
31-455 (>=18 Y)

TANNER STAGES: FEMALES

I <16-235
II <16-367
III <16-430
IV-V <16-412

N81151F12 <16-398

TANNER STAGES: FEMALES

I <16-235
II <16-367
III <16-430
IV-V <16-412

N81151F15 <16-407

TANNER STAGES: FEMALES

I <16-235
II <16-367
III <16-430
IV-V <16-412

N81151F17 <16-423

TANNER STAGES: FEMALES

I <16-235
II <16-367
III <16-430
IV-V <16-412

CODE TEXT

N81151F6 <16-276

TANNER STAGES: FEMALES

I <16-235
II <16-367
III <16-430

IV-V <16-412

N81151F9

<16-212

TANNER STAGES: FEMALES

- I <16-235
- II <16-367
- III <16-430
- IV-V <16-412

N81151M

PREMATURE INFANTS: 26-28 WK:
1219-9799

PREMATURE INFANTS: 29-36 WK:
346-8911

FULL TERM: 1-5 MO:
229-3104

- 221-1981 (6-11 MO)
- 35-712 (1-2 Y)
- <16-276 (3-6 Y)
- <16-187 (7-9 Y)
- <16-392 (10-12 Y)
- 35-465 (13-15 Y)
- 32-478 (16-17 Y)
- 55-455 (>=18 Y)

TANNER STAGES: MALES

- I <16-208
- II <16-355
- III <16-450
- IV-V 35-478

N81151M12

<16-392

TANNER STAGES: MALES

- I <16-208
- II <16-355
- III <16-450
- IV-V 35-478

CODE TEXT

N81151M15

35-465

TANNER STAGES: MALES

- I <16-208
- II <16-355
- III <16-450
- IV-V 35-478

N81151M17

32-478

TANNER STAGES: MALES
I <16-208
II <16-355
III <16-450
IV-V 35-478

N81151M6 <16-276

TANNER STAGES: MALES
I <16-208
II <16-355
III <16-450
IV-V 35-478

N81151M9 <16-187

TANNER STAGES: MALES
I <16-208
II <16-355
III <16-450
IV-V 35-478

N88645F NOT ESTABLISHED (<=6 Y)
<16-150 (7-9 Y)
19-220 (10-12 Y)
22-210 (13-15 Y)
22-229 (16-17 Y)
33-248 (>=18 Y)

TANNER STAGES: FEMALES
I <16-171
II 22-229
III 34-215
IV-V 26-235

N88645F12 19-220

TANNER STAGES: FEMALES
I <16-171
II 22-229
III 34-215
IV-V 26-235

CODE TEXT

N88645F15 22-210

TANNER STAGES: FEMALES
I <16-171
II 22-229

III 34-215
IV-V 26-235

N88645F17 22-229

TANNER STAGES: FEMALES
I <16-171
II 22-229
III 34-215
IV-V 26-235

N88645F6 <16-150 (7-9 Y)

TANNER STAGES: FEMALES
I <16-171
II 22-229
III 34-215
IV-V 26-235

N88645F9 <16-150

TANNER STAGES: FEMALES
I <16-171
II 22-229
III 34-215
IV-V 26-235

N88645M NOT ESTABLISHED (<=6 Y)
<16-205 (7-9 Y)
<16-151 (10-12 Y)
18-197 (13-15 Y)
17-228 (16-17 Y)
33-248 (>=18 Y)

TANNER STAGES: MALES
I <16-156
II <16-143
III <16-214
IV-V 19-201

N88645M12 <16-151

TANNER STAGES: MALES
I <16-156
II <16-143
III <16-214
IV-V 19-201

CODE TEXT

N88645M15 18-197

TANNER STAGES: MALES
I <16-156
II <16-143
III <16-214
IV-V 19-201

N88645M17 17-228

TANNER STAGES: MALES
I <16-156
II <16-143
III <16-214
IV-V 19-201

N88645M6 <16-205 (7-9 Y)

TANNER STAGES: MALES
I <16-156
II <16-143
III <16-214
IV-V 19-201

N88645M9 <16-205

TANNER STAGES: MALES
I <16-156
II <16-143
III <16-214
IV-V 19-201

TOTAL OF 25 NORMALS CODES

*** END OF REPORT ***

1-800-533-1710

PATIENT NAME TESTING, EMIR IS		PATIENT NUMBER		AGE 40	SEX M	ACCESSION # G9137265
ORDERING PHYSICIAN		CLIENT ORDER #				ACCOUNT # LIAISONS
COLLECTION 10/13/09 09:05 A	RECEIVED	REPORT PRINTED 10/19/09 10:41 A		SPECIMEN INFORMATION DATE OF BIRTH:		
DATE TIME	DATE TIME	DATE TIME	DATE TIME			
Test Client Attn: Mayo Liaisons 200 First Street SW Rochester, MN 55905 507-284-8202						

TEST REQUESTED	HI	LO	REF RANGE	PERFORM SITE *
Pregnenolone and 17-OH Pregnenolone				
17-Hydroxypregnenolone, S	140		ng/dL 55-455	MCR
Pregnenolone, S	120		ng/dL 33-248	MCR

* PERFORMING SITE

MCR Mayo Clinic Dpt of Lab Med & Pathology 200 First Street SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.
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PATIENT NAME TESTING, EMIR IS	ORDER STATUS Final	COLLECTION DATE AND TIME 10/13/09 09:05 A
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