

**REPORT**

Name	: Baby. N NAINIKA	Sample ID	: 24864074
Age/Gender	: 13 Years/Female	Reg. No	: 0312404100024
Referred by	: Dr. G CHANDRA SHEKAR RAO	SPP Code	: SPL-CV-172
Referring Customer	: V CARE MEDICAL DIAGNOSTICS	Collected On	: 10-Apr-2024 06:53 PM
Primary Sample	: Whole Blood	Received On	: 10-Apr-2024 09:52 PM
Sample Tested In	: Serum	Reported On	: 10-Apr-2024 11:59 PM
Client Address	: Kimtee colony ,Gokul Nagar,Tarnaka	Report Status	: Final Report

**IMMUNOLOGY & SEROLOGY**

Test Name	Results	Units	Ref. Range	Method
<b>Testosterone Free</b>	1.18	pg/mL	0-2.24	ELISA

**Interpretation :**

- Most circulating testosterone is bound to sex hormone-binding globulin (SHBG), a lesser fraction is albumin bound and a small proportion exists as free hormone. Testosterone is weakly bound to serum albumin and dissociates freely in the capillary bed, and is readily available for tissue uptake.
- All non-SHBG-bound testosterone is considered bioavailable.
- During childhood, increase production of testosterone causes premature puberty in boys and masculinization in girls. In adult women, excess testosterone production can cause virilization, including hirsutism, acne, oligo-amenorrhea, or infertility.
- Common causes of pronounced elevations of testosterone include genetic conditions (eg, congenital adrenal hyperplasia); adrenal, testicular, and ovarian tumors etc.
- Decreased testosterone in females causes mild symptoms like some decline in libido and nonspecific mood changes. In males, it results in partial or complete degrees of hypogonadism.
- Measurement of total testosterone may not be sufficient for diagnosis but is helpful if it is combined with measurements of LH and follicle-stimulating hormone. However, these tests may be insufficient for diagnosis of mild abnormalities of testosterone homeostasis, particularly if abnormalities in function and levels of SHBG are present.
- Additional measurements of free testosterone or bioavailable testosterone are recommended in this situation.
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**DR. RUTURAJ MANIKLAL KOLHAPURE**  
MD, MICROBIOLOGIST

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**CLINICAL BIOCHEMISTRY**

Test Name	Results	Units	Ref. Range	Method
<b>Progesterone</b>	0.97	ng/mL	Refer Table	CLIA

**Interpretation:**

Age	Reference Range: Male (ng/mL)	Reference Range: Female (ng/mL)
<b>Pre Puberty Child</b>		
1-10 Years	0.07-0.52	0.07-0.52
<b>Puberty Tanner Stage</b>		
1	< 0.10-0.33	< 0.10-0.33
2	< 0.10-0.33	< 0.10-0.55
3	< 0.10-0.48	< 0.10-4.5
4	< 0.10-1.08	< 0.10-13.0
5	0.21-0.82	0.10-9.5
<b>Adult</b>	0.28-1.22	
Follicular Phase	----	0.15-1.40
Luteal Phase	----	3.34-25.56
Mid luteal phase		4.44-28.03
Postmenopausal	----	0.15-0.73
Pregnant	----	First trimester :11.22-90.00 Second trimester:25.55-89.40 Third trimester:48.40-422.50

- Serum progesterone is a test to measure the amount of progesterone in the blood. Progesterone is a hormone produced mainly in the ovaries. Progesterone plays a key role in pregnancy. It is produced after ovulation in the second half of the menstrual cycle. It helps make a woman's uterus ready for a fertilized egg to be implanted. It also prepares the uterus for pregnancy by inhibiting the uterine muscle to contract and the breasts for milk production.



*Dr. Vaishnavi*  
**DR. VAISHNAVI**  
**MD BIOCHEMISTRY**

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**CLINICAL BIOCHEMISTRY**

Test Name	Results	Units	Ref. Range	Method
LH (Leutinizing Hormone)	22.86	mIU/mL	Refer Table	CLIA

**Interpretation:**

Age	Reference Range: Male (mIU/mL)	Reference Range: Female(mIU/mL)
<b>Pre Puberty Child</b>		
2-11 Months	0.02-8.0	0.02-8.0
1-10 Years	0.04-3.6	0.03-3.9
<b>Puberty Tanner Stage</b>		
1	0.04-3.6	0.03-3.0
2	0.26-4.8	0.10-4.1
3	0.56-6.3	0.20-9.1
4-5	0.56-7.8	0.50-15.0
<b>Adult</b>	20-70 years:1.5-9.3 > 70 years:3.1-34.6	
Follicular Phase	----	1.9-12.5
Midcycle Peak	----	8.7-76.3
Luteal Phase	----	0.5-16.9
Postmenopausal	----	15.9-54.0
Pregnant	----	< 0.1-1.5
Contraceptives	----	0.7-5.6

**Increased Values Of LH Seen In:**

- Menopause,ovarian dysgenesis. (Turner syndrome),Testicular dysgenesis (Klinefelter syndrome).
- Precocious puberty

**Decreased Values Of LH Seen In:**

- Pituitary failure. Both LH/ FSH are low.
- hypothalamic failure will also lead to low LH and FSH level.



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**CLINICAL BIOCHEMISTRY**

Test Name	Results	Units	Ref. Range	Method
Estradiol-(eE2)	81.18	pg/mL	Refer Table	CLIA

Age	Reference Range: Male(pg/mL)	Reference Range: Female(pg/mL)
0-1 Yr	< 19.88 - 52.50	< 19.88 - 52.50
1-8 Yr	<19.88	<19.88
<b>Puberty Tanner Stage</b>		
1	3-15	5-10
2	3-10	5-115
3	5-15	5-180
4	3-40	25-345
5	15-45	25-410
<b>Adult</b>	0-39.8	
Follicular Phase	----	19.5-144.2
Midcycle Peak	----	63.9-356.7
Luteal Phase	----	55.8-214.2
Postmenopausal	----	0-32.0

An estradiol test measures the amount of a hormone called estradiol in the blood. Estradiol is one of the main types of estrogens.

In women, most estradiol is released from the ovaries and adrenal glands. It is also released by the placenta during pregnancy. Estradiol is also produced in other body tissues, such as skin, fat, cells bone, brain, and liver. Estradiol plays a role in:

- Growth of the womb (uterus), fallopian tubes, and vagina
  - Breast development
  - Menopause
  - In men, a small amount of estradiol is mainly released by the testes. Estradiol helps prevent sperm from dying too early.
- This test may be ordered to check:
- How well your ovaries, placenta, or adrenal glands work
  - If you have signs of an ovarian tumor
  - If your periods have stopped (levels of estradiol vary, depending on the time of month)



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**CLINICAL BIOCHEMISTRY**

Test Name	Results	Units	Ref. Range	Method
<b>FSH (Follicle Stimulating Hormone)</b>	6.70	mIU/mL	Refer Table	CLIA

**Interpretation:**

Age	Reference Range: Male (mIU/mL)	Reference Range: Female(mIU/mL)
<b>Pre Puberty Child</b>		
2-11 Months	0.19-11.3	0.10-11.3
1-10 Years	0.3-4.6	0.68-6.7
<b>Puberty Tanner Stage</b>		
1-2	0.30-4.6	0.68-6.7
3-4	1.24-15.4	1.0-7.4
5	1.53-6.8	1.0-9.2
<b>Adult</b>	1.42-18.4	
Follicular Phase	----	2.5-10.2
Midcycle Peak	----	3.4-33.4
Luteal Phase	----	1.5-9.1
Postmenopausal	----	23.0-116.3
Pregnant	----	< 0.3

The follicle stimulating hormone (FSH) blood test measures the level of FSH in blood. FSH is a hormone released by the pituitary gland, located on the underside of the brain.

**Low FSH levels in women may be present due to:**

- Being very underweight or having had recent rapid weight loss
- Not producing eggs (not ovulating)
- Parts of the brain (the pituitary gland or hypothalamus) not producing normal amounts of some or all of its hormones
- Pregnancy

**High FSH levels in men may mean the testicles are not functioning correctly due to:**

- Advancing age (male menopause)
- Damage to testicles caused by alcohol abuse, chemotherapy, or radiation
- Certain tumors in the pituitary gland

Correlate Clinically.

Laboratory is NABL Accredited

\*\*\* End Of Report \*\*\*



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