


**LABORATORY TEST REPORT**

Name	: Mrs. KAVERI		
Sample ID	: A1309738		
Age/Gender	: 26 Years/Female	Reg. No	: 0312501310024
Referred by	: Dr. Nivedita Ashrit MD (Obs/Gyn)	SPP Code	: SPL-CV-172
Referring Customer	: V CARE MEDICAL DIAGNOSTICS	Collected On	: 31-Jan-2025 12:39 PM
Primary Sample	: Whole Blood	Received On	: 31-Jan-2025 03:39 PM
Sample Tested In	: Serum	Reported On	: 31-Jan-2025 05:48 PM
Client Address	: Kimtee colony ,Gokul Nagar,Tarnaka	Report Status	: Final Report


**CLINICAL BIOCHEMISTRY**

Test Name	Results	Units	Biological Reference Interval
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**Beta- Human Chorionic Gonadotropin Hormone** 0.29 mIU/mL Refer to Interpretation  
 (Method: CLIA)

**Interpretation:**

- A quantitative human chorionic gonadotropin (HCG) test measures the specific level of HCG in the blood. HCG is a hormone produced in the body during pregnancy.
- HCG appears in the blood and urine of pregnant women as early as 10 days after conception. Quantitative HCG measurement helps determine the exact age of the fetus. It can also assist in the diagnosis of abnormal pregnancies, such as ectopic pregnancies, molar pregnancies, and possible miscarriages. It is also used as part of a screening test for Down syndrome.
- This test is also done to diagnose abnormal conditions not related to pregnancy that can raise HCG level.

**Non Pregnant Females: < 10.0 mIU/mL**

**Post Menopausal Females: < 10.0 mIU/mL**

**Pregnancy**

Gestational Age and Expected hCG Values (mIU/mL)	Gestational Age and Expected hCG Values (mIU/mL)	Gestational Age and Expected hCG Values (mIU/mL)
0.2-1 weeks: 10-50	1-2 weeks : 50-500	2-3 weeks : 500-10,000
3-4 weeks : 1000-50,000	5-6 weeks : 10,000-100,000	6-8 weeks : 15,000-200,000
2-3 months : 10,000-100,000		

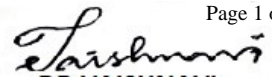

**TSH -Thyroid Stimulating Hormone** 6.16 µIU/mL 0.35-5.5  
 (Method: CLIA)

**Pregnancy & Cord Blood**

TSH (Thyroid Stimulating Hormone (µIU/mL))	
First Trimester	: 0.24-2.99
Second Trimester	: 0.46-2.95
Third Trimester	: 0.43-2.78
Cord Blood	: 2.3-13.2

- TSH is synthesized and secreted by the anterior pituitary in response to a negative feedback mechanism involving concentrations of FT3 (free T3) and FT4 (free T4). Additionally, the hypothalamic tripeptide, thyrotropin-releasing hormone (TRH), directly stimulates TSH production.
- TSH interacts with specific cell receptors on the thyroid cell surface and exerts two main actions. The first action is to stimulate cell reproduction and hypertrophy. Secondly, TSH stimulates the thyroid gland to synthesize and secrete T3 and T4
- The ability to quantitate circulating levels of TSH is important in evaluating thyroid function. It is especially useful in the differential diagnosis of primary (thyroid) from secondary (pituitary) and tertiary (hypothalamus) hypothyroidism. In primary hypothyroidism, TSH levels are significantly elevated, while in secondary and tertiary hypothyroidism, TSH levels are low
- TRH stimulation differentiates secondary and tertiary hypothyroidism by observing the change in patient TSH levels. Typically, the TSH response to TRH stimulation is absent in cases of secondary hypothyroidism, and normal to exaggerated in tertiary hypothyroidism
- Historically, TRH stimulation has been used to confirm primary hyperthyroidism, indicated by elevated T3 and T4 levels and low or undetectable TSH levels. TSH assays with increased sensitivity and specificity provide a primary diagnostic tool to differentiate hyperthyroid from euthyroid patients.



  
**DR. VAISHNAVI**  
**MD BIOCHEMISTRY**