

THYROID PROFILE, FREE,  
SERUM  
(CLIA)

T3, Free; FT3	-	pg/mL
T4, Free; FT4	-	ng/dl
TSH, Ultrasensitive	-	uIU/mL

TEST	REFERENCE GROUP	REFERENCE RANGE
T3 Free in pg/mL	<18 years	2.60 - 4.80
	> 18 years	2.30 – 4.20
TSH, Ultrasensitive in uIU/mL	1-4 days	1.000-39.000
	5 days-5 months	1.700-9.100
	5 months-20 years	0.700-6.400
	>20 years	0.550 – 4.780
T4, Free in ng/dL	1-4 days	2.20-5.30
	5-14 days	Not Established
	2 weeks – 20 years	0.80-2.00
	> 20 years	0.89 – 1.76

## Interpretation

PREGNANCY	REFERENCE RANGE FOR TSH IN uIU/mL ( As per American Thyroid Association)	REFERENCE RANGE FOR FT3 IN pg/mL	REFERENCE RANGE FOR FT4 IN ng/dL
1 <sup>st</sup> Trimester	0.100 – 2.500	2.11-3.83	0.70 -2.00
2 <sup>nd</sup> Trimester	0.200 – 3.000	1.96-3.38	0.50 -1.60
3 <sup>rd</sup> Trimester	0.300 – 3.000	1.96-3.38	0.50 -1.60

Note :1. TSH levels are subject to circadian variation, reaching peak levels between 2 - 4.a.m. and at a minimum between 6-10 pm . The variation is of the order of 50% . hence time of the day has influence on the measured serum TSH concentrations.

. 2. Values <0.03 uIU/mL need to be clinically correlated due to presence of a rare TSH variant in some individuals.

## Clinical Use

- Primary Hypothyroidism
- Hyperthyroidism
- Hypothalamic – Pituitary hypothyroidism
- Inappropriate TSH secretion
- Nonthyroidal illness
- Autoimmune thyroid disease
- Pregnancy associated thyroid disorders
- Thyroid dysfunction in infancy and early childhood