

Patient: **SAMPLE
PATIENT**

DOB:

Sex:

MRN:

4400 Comprehensive Thyroid Assessment - Serum

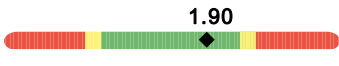
Methodology: Chemiluminescent, RIA

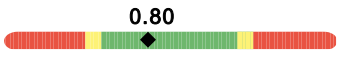
Comprehensive Thyroid Assessment

Central Regulation

Reference
Range

Reference
Range

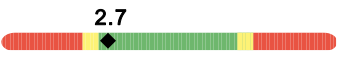
Thyroid Stimulating
Hormone (TSH)  1.90 0.40-2.50 microIU/mL

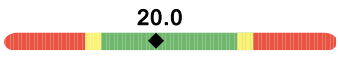
Free Thyroxine
(FT4)  0.80 0.61-1.12 ng/dL

Peripheral Regulation

Reference
Range

Reference
Range

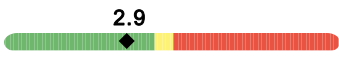
Free
Triiodothyronine
(FT3)  2.7 2.5-3.9 pg/mL


Reverse T3
(RT3)  20.0 9.0-35.0 ng/dL

Thyroid Antibodies

Reference
Range

Reference
Range

Anti-Thyroglobulin
Antibody (Anti-TG)  2.9 <4.0 IU/mL

Anti-Thyroid
Peroxidase
(Anti-TPO)  7 <9 IU/mL

*The performance characteristics of all assays have been verified by Genova Diagnostics Inc. Assays are cleared by the U.S. Food and Drug Administration, unless otherwise noted with ♦.

Thyroid Metabolism Summary

Thyroid hormone production is centrally regulated (hypothalamus-pituitary-thyroid axis) but thyroxine (T4) from the thyroid gland is peripherally transformed in liver and kidney cells into T3 and reverse T3 (rT3). Ultimately, the site of action for thyroid hormones is at cell nuclei throughout the body, where T3 is five times as potent as T4, and rT3 is completely inert. Thyroid dysfunction may occur even when the hypothalamus-pituitary-thyroid axis is operating adequately. Problems with peripheral conversion (reflected by T3 and rT3 levels) and/or with immune system interference in the form of auto-antibodies (reflected by anti-thyroglobulin and anti-thyroidal peroxidase antibodies) may still affect thyroid hormone production or its action at the cellular level. Thus to achieve a comprehensive assessment of thyroid adequacy, central regulation, peripheral conversion, and auto-immune involvement must be thoroughly evaluated.



Thyroid Metabolism-At-A-Glance

