

Reporting Title: Thyroxine-Binding Protein Electro
Performing Location: Rochester

Ordering Guidance:
This assay measures thyroxine binding to various proteins.

For analysis of thyroxine-binding globulin, see TBGI / Thyroxine-Binding Globulin (TBG), Serum.
For immunologic assay of prealbumin, see PALB / Prealbumin, Serum.

This test **should not be requested** in patients who have recently received radioisotopes, therapeutically or diagnostically, because of potential assay interference. A recommended time period before collection cannot be made because it will depend on the isotope administered, the dose given, and the clearance rate in the individual patient.

The total T4 test **should not be used** in patients receiving treatment with lipid-lowering agents containing dextrothyroxine unless therapy is discontinued for 4 to 6 weeks to allow the T4 physiological state to become re-established prior to testing.

Specimen Requirements:
Patient Preparation: For 12 hours before specimen collection, do not take multivitamins or dietary supplements containing biotin (vitamin B7), which is commonly found in hair, skin, and nail supplements and multivitamins.
Collection Container/Tube:
Preferred: Serum gel
Acceptable: Red top
Submission Container/Tube: Plastic vial
Specimen Volume: 1.6 mL
Collection Instructions: Centrifuge and aliquot serum into a plastic vial.

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	7 days	
	Frozen	30 days	
	Ambient	24 hours	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
T4	T4 (Thyroxine), Total Only, S	Numeric	mcg/dL	83119-8
2860	TBG	Numeric	mcg T4/dL	14016-0
2861	Albumin	Numeric	mcg T4/dL	11062-7
2862	Pre-Albumin	Numeric	mcg T4/dL	14014-5
2863	Abnormal Binding Protein	Numeric	mcg T4/dL	48767-8
3345	Comment	Alphanumeric		50681-6

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
TBPE	Thyroxine-Binding Protein Electro	1	82664	Yes	No
T4	T4 (Thyroxine), Total Only, S	1	84436	Yes	Yes

CPT Code Information:

84436

82664

Reference Values:

THYROXINE-BINDING PROTEIN ELECTROPHORESIS:

10.3-24.9 mcg T4/dL bound to thyroxine-binding globulin

11.5-34.1 mcg T4/dL bound to albumin

48.8-70.4 mcg T4/dL bound to prealbumin

T4 (THYROXINE), TOTAL ONLY:

Adult (> or =20 years): 4.5-11.7 mcg/dL

Pediatric:

0-5 days: 5.0-18.5 mcg/dL

6 days-2 months: 5.4-17.0 mcg/dL

3-11 months: 5.7-16.0 mcg/dL

1-5 years: 6.0-14.7 mcg/dL

6-10 years: 6.0-13.8 mcg/dL

11-19 years: 5.9-13.2 mcg/dL