Clinical Use
• Confirm presence of autoimmune thyroid disease

Reference Range
<35 IU/mL

Interpretive Information
• Hashimoto thyroiditis (HT)
• Primary hypothyroidism (due to HT)
• Graves disease
• Postpartum thyroiditis

Clinical Background
Thyroid peroxidase (TPO) is an enzyme that catalyzes the iodination and coupling steps in thyroid hormone biosynthesis. It is now known to be the principal microsomal antigen against which antibodies are directed in autoimmune thyroid diseases. The main use of this test is to confirm that a patient's diffuse goiter and/or hypothyroidism is due to autoimmune thyroiditis. The test may also help distinguish Graves disease from toxic nodular goiter. The TPO antibody measurement has replaced the thyroid antimicrosomal antibody (AMA) measurement.

TPO antibodies may be detected in individuals without clinically significant thyroid disease. They do not define the patient's thyroid functional status.

Method
• Immunochemiluminometric assay (ICMA)
• Analytical sensitivity: 10 IU/mL

Specimen Requirements
1 mL refrigerated serum
0.5 mL minimum
No additive red top preferred
SST red top acceptable