

## Clinical Use

- Diagnose and manage Graves disease, neonatal hypothyroidism, and postpartum thyroid dysfunction

## Reference Range

Adults and children:  $\leq 16\%$  inhibition

Graves disease: 16% - 100% inhibition

## Interpretive Information



- Graves disease
- Atrophic thyroiditis
- Postpartum autoimmune thyroid disease
- Neonatal Graves disease
- Transient neonatal hypothyroidism

## Clinical Background

Autoimmune thyroid diseases are associated with thyroid autoantibodies, including several types directed against the TSH receptor. TSH receptor autoantibodies may be stimulatory, mimicking the actions of TSH, as in Graves disease. Alternatively, they may inhibit TSH binding and block the action of endogenous TSH. Such blocking autoantibodies produce transient neonatal hypothyroidism and chronic atrophic thyroiditis. TBII, which measures the ability of antibodies to inhibit TSH binding to its receptor, reflects the presence of either or both the stimulatory and inhibitory immunoglobulin classes.

## Method

- Radioreceptor assay
- Analytical sensitivity: 2% inhibition

## Specimen Requirements

1 mL refrigerated serum

0.5 mL minimum

No additive red top preferred

SST red top acceptable