

Thyroid Antibody



Does this test have other names?

TPO Abs, TgAb, TSH-Rs Abs, TSI

What is this test?

This test measures the number of thyroid antibodies in your blood. The test can help find out if you have a problem with your thyroid.

Your thyroid is a butterfly-shaped gland near the base of your throat above your collarbone. The thyroid makes 2 hormones, T3 and T4. These hormones affect your energy levels, mood, weight, and other important aspects of your health.

In some people, the immune system makes antibodies that affect the thyroid gland. This causes health problems. These antibodies may target:

- **Thyroid peroxidase (TPO).** This can lead to Hashimoto thyroiditis. This is an autoimmune disorder that causes an underactive thyroid (hypothyroidism).
- **Thyroglobulin (Tg).** This substance in the thyroid plays a role in T3 and T4 production. Almost everyone with Hashimoto thyroiditis has high levels of antibodies against TPO and Tg.
- **Thyroid-stimulating hormone (TSH) receptor.** This can cause Graves' disease. This can lead to overactive thyroid (hyperthyroidism).

Why do I need this test?

You may need this test if your healthcare provider thinks that you may have Graves' disease or Hashimoto thyroiditis.

Symptoms of Graves' disease include:

- Bulging eyes
- Eye symptoms like irritation, pressure, light sensitivity, double vision, and trouble moving eyes
- Irritability
- Nervousness
- Weight loss
- Extreme tiredness
- Muscle weakness
- Low tolerance for heat
- Trouble sleeping
- Tremors in the hands
- Fast, irregular heartbeat
- Diarrhea

- Redness and swelling on shins
- Swollen thyroid, called goiter

Symptoms of Hashimoto thyroiditis include:

- Goiter that shrinks over time
- Extreme tiredness
- Low tolerance for cold
- Weight gain
- Body and joint pain
- Hair loss
- Constipation
- Irregular menstrual periods
- Depression
- Memory problems
- Slower heart rate

What other tests might I have along with this test?

You may also have other tests, including:

- Blood test to measure your level of TSH, which is made by your pituitary gland. TSH sets how much thyroid hormone your thyroid makes.
- Blood tests to measure free T4 and free T3 levels
- Thyroid ultrasound to look for changes in the thyroid gland
- Radioactive iodine uptake test and thyroid scan to look for signs of Graves' disease

What do my test results mean?

Test results may vary depending on your age, gender, health history, and other things. Your test results may be different depending on the lab used. They may not mean you have a problem. Ask your healthcare provider what your test results mean for you.

Negative results mean that no antibodies against TPO, Tg, or TSH were found. You likely don't have a problem with your thyroid.

If your results show antibodies against TPO or Tg, you may have Hashimoto thyroiditis.

If your results show antibodies against TSH receptor, you may have Graves' disease.

People with type 1 diabetes or certain autoimmune diseases and pregnant women are more likely to have antibodies against the thyroid.

How is this test done?

The test is done with a blood sample. A needle is used to draw blood from a vein in your arm or hand.

Does this test pose any risks?

Having a blood test with a needle carries some risks. These include bleeding, infection, bruising, and feeling lightheaded. When the needle pricks your arm or hand, you may feel a slight sting or pain. Afterward, the site may be sore.

What might affect my test results?

Certain medicines can affect your results. Being pregnant can affect your results.

How do I get ready for this test?

You don't need to prepare for this test. But be sure your healthcare provider knows about all medicines, herbs, vitamins, and supplements you are taking. This includes medicines that don't need a prescription and any illegal drugs you may use.

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