



## Rabbit Anti-TG antibody

SL0291R

<b>Product Name:</b>	TG
<b>Chinese Name:</b>	兔抗甲状腺球蛋白
<b>Alias:</b>	Thyroglobulin; AITD 3; AITD3; hTG; TDH3; Tg; Tgn; THYG HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Cat,
<b>Applications:</b>	WB=1:1000-5000ELISA=1:2000-10000IHC-P=1:200-1000IHC-F=1:200-1000 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	660kDa
<b>Cellular localization:</b>	Secretory protein
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	2mg/1ml
<b>immunogen:</b>	Thyroglobulin protein:full length
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Thyroglobulin is the glycoprotein precursor of the iodinated thyroid hormones thyroxine (T4) and triiodothyronine (T3). Thyroglobulin is obtained from the thyroid gland and exhibits the general properties of the globulins. The human thyroglobulin (hTG) is a high molecular weight glycoprotein (605 kDa) found in the thyroid follicular cells. It plays a central role in the uptake, incorporation, and regulated biosynthesis of thyroid hormones, T4 and T3. Thyroid disorders are, in large part, due to autoimmune origin, and anti thyroglobulin autoantibodies were the first factor to be discovered. Anti hTG is

found in all thyroid autoimmune diseases (Hashimoto's thyroiditis, Graves' diseases), with the highest level observed in Hashimoto's thyroiditis. Anti hTG is also characteristic of thyroid cancer, and its determination can be used for the follow up of cancer patients.

**Function:**

Precursor of the iodinated thyroid hormones thyroxine (T4) and triiodothyronine (T3).

**Subunit:**

Homodimer.

**Subcellular Location:**

Secreted.

**Tissue Specificity:**

Thyroid gland specific.

**Post-translational modifications:**

Sulfated tyrosines are desulfated during iodination.

**DISEASE:**

Defects in TG are the cause of thyroid dysmorphogenesis 3 (TDH3) [MIM:274700]. A disorder due to thyroid dysmorphogenesis, causing large goiters of elastic and soft consistency in the majority of patients. Although the degree of thyroid dysfunction varies considerably among patients with defective thyroglobulin synthesis, patients usually have a relatively high serum free triiodothyronine (T3) concentration with disproportionately low free tetraiodothyronine (T4) level. The maintenance of relatively high free T3 levels prevents profound tissue hypothyroidism except in brain and pituitary, which are dependent on T4 supply, resulting in neurologic and intellectual defects in some cases.

Variations in TG are associated with susceptibility to autoimmune thyroid disease type 3 (AITD3) [MIM:608175]. AITDs including Graves disease (GD) and Hashimoto thyroiditis (HT), are among the most common human autoimmune diseases. They are complex diseases, which are caused by an interaction between susceptibility genes and nongenetic factors, such as infection.

**Similarity:**

Belongs to the type-B carboxylesterase/lipase family.

Contains 11 thyroglobulin type-1 domains.

**SWISS:**

P01266

**Gene ID:**

7038

**Database links:**

[Entrez Gene: 7038](#)Human

[Entrez Gene: 21819](#)Mouse

[Entrez Gene: 24826](#)Rat

[Omim: 188450](#)Human

[SwissProt: P01266](#)Human

[SwissProt: O08710](#)Mouse

[SwissProt: P06882](#)Rat

[Unigene: 654591](#)Human

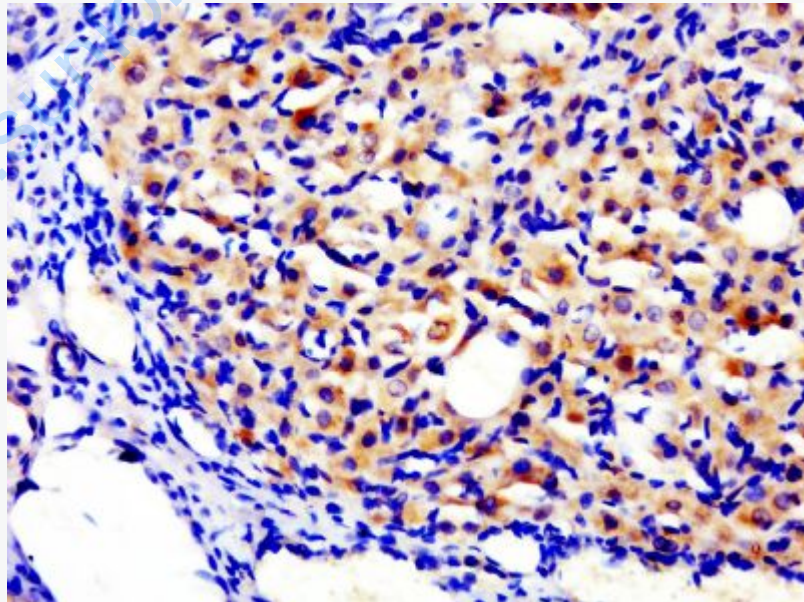
[Unigene: 441333](#)Mouse

[Unigene: 10429](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Picture:**



Paraformaldehyde-fixed, paraffin embedded (rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3%

hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TG) Polyclonal Antibody, Unconjugated (SL0291R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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