

**THRB Rabbit pAb**  
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**Catalog # AP94251****Specification**

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**THRB Rabbit pAb - Product Information**

Application	IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">P10828</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53 KDa
Physical State	Liquid
Immunogen	Recombinant human THRB protein
Epitope Specificity	209-461/461
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the nuclear hormone receptor family. NR1 subfamily. Contains 1 nuclear receptor DNA-binding domain.
SUBUNIT	Binds DNA as a dimer; homodimer and heterodimer with RXRB. Interacts with NCOA7 in a ligand-inducible manner. Interacts with C1D. Interacts with NR2F6; the interaction impairs the binding of the THRB homodimer and THRB:RXRB heterodimer to T3 response elements. Interacts with PRMT2 and THRSP.
DISEASE	Defects in THRB are the cause of generalized thyroid hormone resistance (GTHR) [MIM:188570, 274300]. GTHR is transmitted as an autosomal dominant trait, but an autosomal recessive form also exists. The disease is characterized by goiter, abnormal mental functions, increased susceptibility to infections, abnormal growth and bone maturation, tachycardia and deafness. Affected individuals may also have attention deficit-hyperactivity disorders (ADHD) and language difficulties. GTHR patients also have high levels of circulating thyroid hormones (T3-T4), with normal or slightly elevated thyroid stimulating hormone (TSH).
Important Note	This product as supplied is intended for

**research use only, not for use in human,  
therapeutic or diagnostic applications.**

### Background Descriptions

Thyroid hormone receptors (TRs) are ligand-dependent transcription factors that mediate the biological activities of thyroid hormone (T3). Thyroid hormone receptor b2 (TRb2) is a high affinity receptor for triiodothyronine which belongs to the nuclear hormone receptor family and the NR1 subfamily. It is composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain. Defects in the receptor result in generalized thyroid hormone resistance (GTHR). GTHR is transmitted as an autosomal dominant trait, but an autosomal recessive form also exists. The disease is characterized by goiter, abnormal mental functions, increased susceptibility to infections, abnormal growth and bone maturation, tachycardia and deafness. GTHR patients also have high levels of circulating thyroid hormones (T3-T4), with normal or slightly elevated thyroid stimulating hormone.

### THRB Rabbit pAb - Additional Information

**Gene ID** 7068

#### Other Names

Thyroid hormone receptor beta, Nuclear receptor subfamily 1 group A member 2, c-erbA-2, c-erbA-beta, THRB, ERBA2, NR1A2, THR1

#### Dilution

IHC-P ~ N/A  
IHC-F ~ N/A  
IF ~ 1:50 ~ 200  
E ~ N/A

#### Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

### THRB Rabbit pAb - Protein Information

**Name** THRB

**Synonyms** ERBA2, NR1A2, THR1

#### Function

Nuclear hormone receptor that can act as a repressor or activator of transcription. High affinity receptor for thyroid hormones, including triiodothyronine and thyroxine.

#### Cellular Location

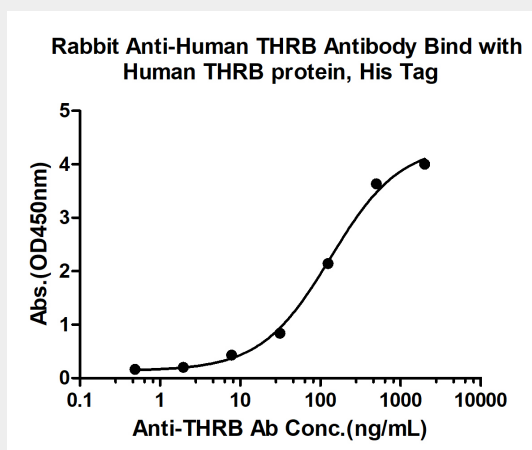
Nucleus.

### THRB Rabbit pAb - Protocols

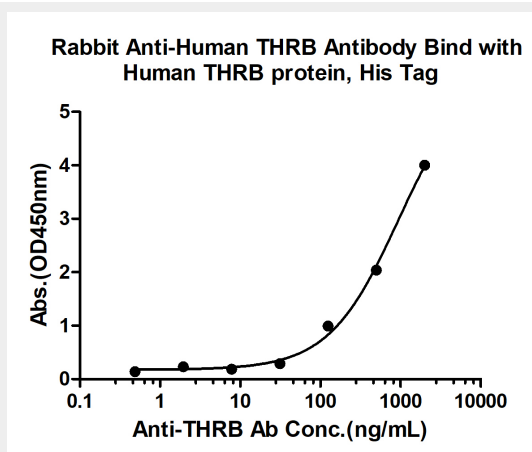
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

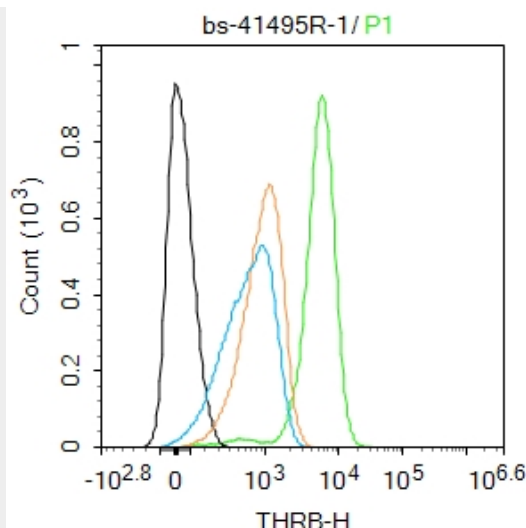
## THRB Rabbit pAb - Images



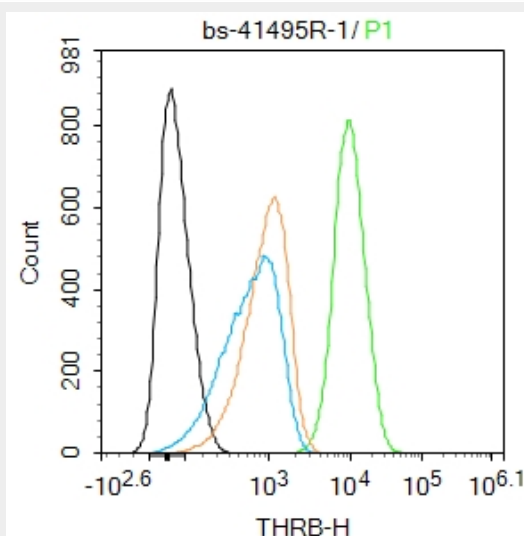
Measured by its binding ability in a indirect ELISA. Immobilized Human THRB protein, His Tag (Cat. bs-41495P) at 2 µg/mL (100 µL/well) can bind Rabbit Anti-Human THRB Antibody, the EC50 is 133.9 ng/mL.



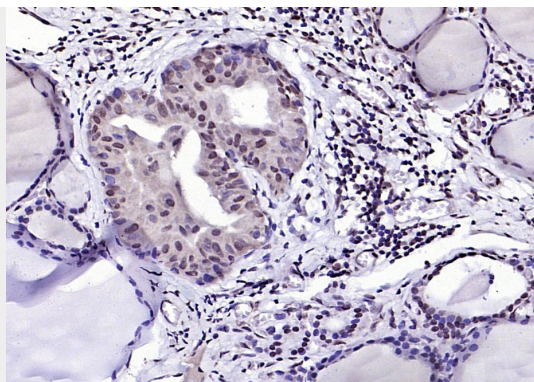
Measured by its binding ability in a indirect ELISA. Immobilized Human THRB protein, His Tag (Cat. bs-41495P) at 2 µg/mL (100 µL/well) can bind Rabbit Anti-Human THRB Antibody, the EC50 is 942.9 ng/mL.



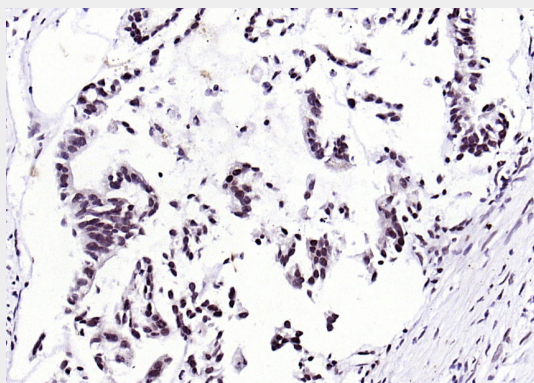
Blank control—black line—:A431. Primary Antibody (green line): Rabbit Anti-THRB antibody (AP94251) Dilution:1ug/Test; Secondary Antibody—white blue line—: Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control—orange line—: Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



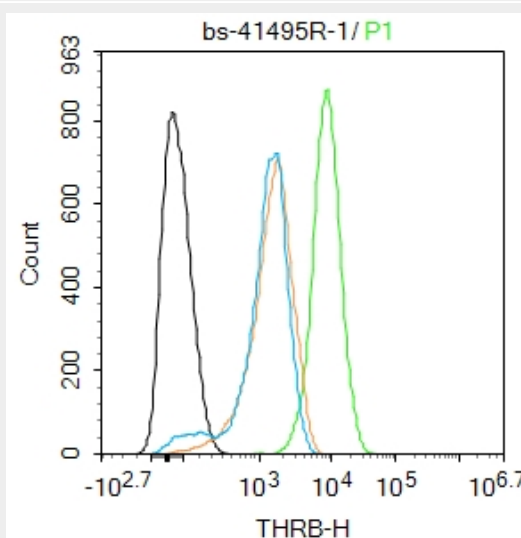
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Paraformaldehyde-fixed, paraffin embedded (human thyroid gland); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (THRB) Polyclonal Antibody, Unconjugated (AP94251) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); 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 (THRB) Polyclonal Antibody, Unconjugated (AP94251) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control—black line—:Hela. Primary Antibody (green line): Rabbit Anti-THRB antibody (AP94251) Dilution:1ug/Test; Secondary Antibody—white blue line—: Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control—orange line—: Normal Rabbit IgG Protocol The cells were fixed

with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

**THRB Rabbit pAb - Background**

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