

THRB Mouse mAb

THRB Mouse mAb Catalog # AP94556

Product Information

Application WB, IHC-P, IHC-F, IF

Primary Accession P10828 Reactivity Human Rabbit Host Monoclonal Clonality Calculated MW 52788 **Physical State** Liquid

Recombinant human THRB protein **Immunogen**

Epitope Specificity 209-461/461

Isotype IgG

Purity affinity purified by Protein A

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. **Buffer**

SUBCELLULAR LOCATION Nucleus.

SIMILARITY

Belongs to the nuclear hormone receptor family. NR1 subfamily. Contains 1

nuclear receptor DNA-binding domain.

Binds DNA as a dimer; homodimer and heterodimer with RXRB. Interacts with **SUBUNIT**

> 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

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).

This product as supplied is intended for research use only, not for use in **Important Note**

human, therapeutic or diagnostic applications.

Thyroid hormone receptors (TRs) are ligand-dependent transcription factors **Background Descriptions**

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

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 WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:400-800,IF=1:100-500,Flow-Cyt=1ug

/Test

Format 0.01M TBS(pH7.4) with 1% BSA, 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.

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

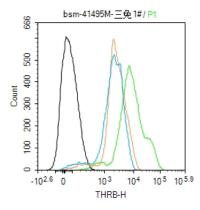
triiodothyronine and thyroxine.

Cellular Location Nucleus.

Background

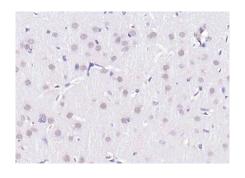
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Images

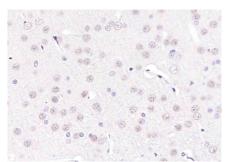


Blank control(black line):HepG2. Primary Antibody (green line): Mouse Anti-THRB antibody (AP94556)
Dilution:1ug/Test; Secondary Antibody(white blue line):
Goat anti-Mouse IgG-AF488 Dilution: 0.5ug/Test. Isotype control(orange line): Normal Mouse IgG Protocol The cells were fixed with 4% PFA (10min at 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.

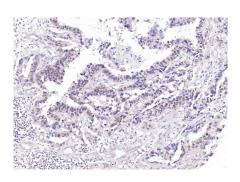
Paraformaldehyde-fixed, paraffin embedded (rat brain);



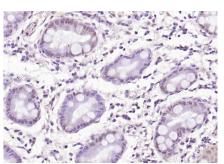
Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (THRB) Monoclonal Antibody, Unconjugated (AP94556) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



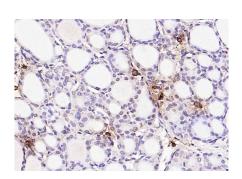
Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (THRB) Monoclonal Antibody, Unconjugated (AP94556) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining



Paraformaldehyde-fixed, paraffin embedded (human colon 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) Monoclonal Antibody, Unconjugated (AP94556) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.

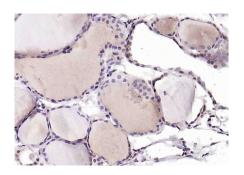


Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (THRB) Monoclonal Antibody, Unconjugated (AP94556) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse 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) Monoclonal Antibody, Unconjugated (AP94556) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.

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) Monoclonal Antibody, Unconjugated (AP94556) at 1:200 overnight at 4°C, followed by operating according to SP



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