SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
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[Primary Antibody]

Rabbit Anti-THRB1 antibody

Catalog Number: SL11440R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	THRB1
Immunogen:	KLH conjugated synthetic peptide derived from human Thyroid Hormone Receptor beta: 201-300/461
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 Flow-Cyt=1ug/Test （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human, Mouse, Rat, (predicted: Chicken, Cow, Rabbit, Sheep)
Predicted MW.:	53 kDa
Subcellular Location:	The nucleus
Background:	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

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	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. **Function:** High affinity receptor for triiodothyronine. **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. **Subcellular Location:** Nucleus. 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). **Similarity:** Belongs to the nuclear hormone receptor family. NR1 subfamily. Contains 1 nuclear receptor DNA-binding domain. **Database links:** **Entrez Gene:** 7068 Human **Entrez Gene:** 24831 Rat Omim: 190160 Human **SwissProt:** P10828 Human **SwissProt:** P18113 Rat **Unigene:** 187861 Human **Unigene:** 728126 Human **Unigene:** 88692 Rat

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[VALIDATION IMAGES]

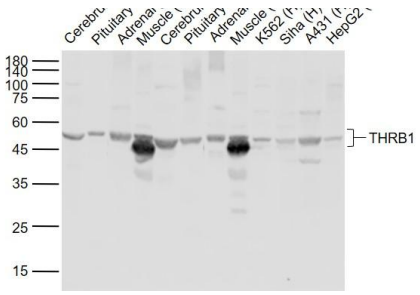


Figure 1. Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Pituitary (Mouse) Lysate at 40 ug Lane 3: Adrenal gland (Mouse) Lysate at 40 ug Lane 4: Muscle (Mouse) Lysate at 40 ug Lane 5: Cerebrum (Rat) Lysate at 40 ug Lane 6: Pituitary (Rat) Lysate at 40 ug Lane 7: Adrenal gland (Rat) Lysate at 40 ug Lane 8: Muscle (Rat) Lysate at 40 ug Lane 9: K562 (Human) Cell Lysate at 30 ug Lane 10: Siha (Human) Cell Lysate at 30 ug Lane 11: A431 (Human) Cell Lysate at 30 ug Lane 12: HepG2 (Human) Cell Lysate at 30 ug Primary: Anti-THRB1 (SL11440R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 53/46 kD Observed band size: 53/46 kD

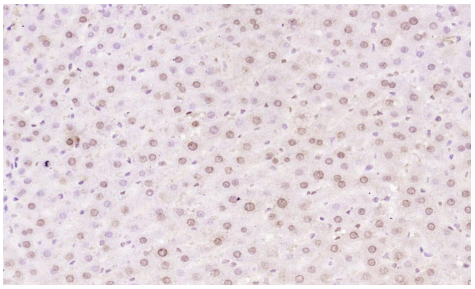


Figure 2. Paraformaldehyde-fixed, paraffin embedded (rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (THRB1) Polyclonal Antibody, Unconjugated (SL11440R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining

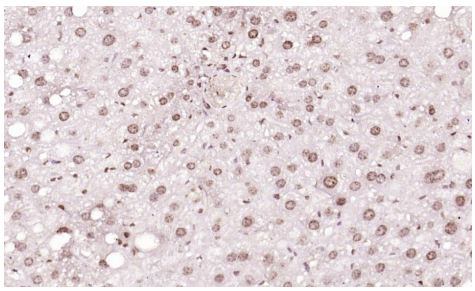


Figure 3. Paraformaldehyde-fixed, paraffin embedded (mouse liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (THRB1) Polyclonal Antibody, Unconjugated (SL11440R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining

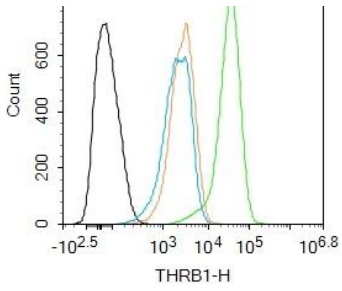


Figure 4. Blank control:A431. Primary Antibody (green line): Rabbit Anti-THRB1 antibody (SL11440R) Dilution: 1ug/Test; Secondary Antibody: Goat anti-rabbit IgG-BF488 Dilution: 0.5ug/Test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃.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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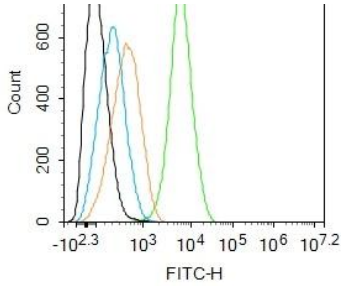


Figure 5. Blank control: A431. Primary Antibody (green line): Rabbit Anti-THRB1 antibody (SL11440R) Dilution: 1ug/Test; Secondary Antibody: Goat anti-rabbit IgG-FITC Dilution: 0.5ug/Test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃.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

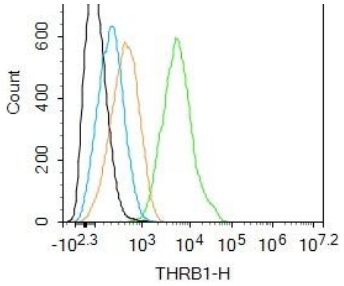


Figure 6. Blank control: A431. Primary Antibody (green line): Rabbit Anti-THRB1 antibody (SL11440R) Dilution: 1ug/Test; Secondary Antibody: Goat anti-rabbit IgG-FITC Dilution: 0.5ug/Test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃.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

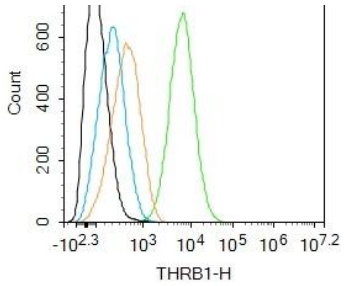


Figure 7. Blank control: A431. Primary Antibody (green line): Rabbit Anti-THRB1 antibody (SL11440R) Dilution: 1ug/Test; Secondary Antibody: Goat anti-rabbit IgG-FITC Dilution: 0.5ug/Test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃.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

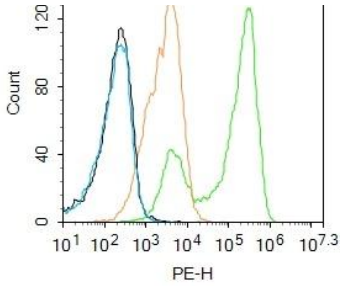


Figure 8. Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-THRB1 antibody (SL11440R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-PE Dilution: 1μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20℃. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at 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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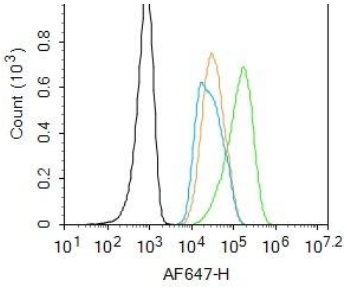


Figure 9. Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-THRB1 antibody (SL11440R) Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-BF647 Dilution: 1µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃. 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

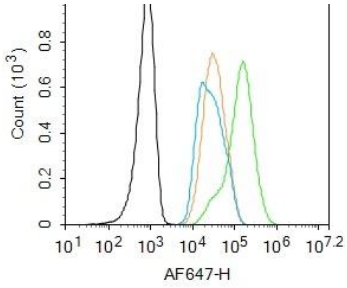


Figure 10. Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-THRB1 antibody (SL11440R) Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-BF647 Dilution: 1µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃. 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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