

THRB Monoclonal Antibody (J52)

Product Details

Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Human, Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	J52
Conjugate	Unconjugated
Immunogen	Purified human TR beta -1 protein.
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4, with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2287303

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	21 Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:20	-
Immunocytochemistry (ICC/IF)	1:500	1 Publication
Immunoprecipitation (IP)	Assay-dependent	1 Publication
ChIP assay (ChIP)	-	5 Publications
Gel Shift (GS)	Assay-dependent	1 Publication

Product Specific Information

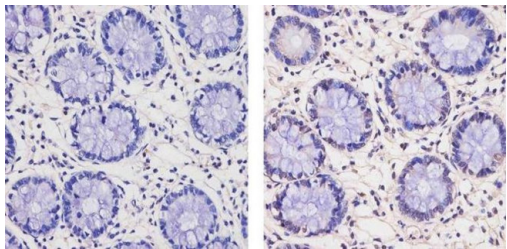
MA1-216 detects thyroid hormone receptor (TR) beta-1 in human, mouse, rat, and transformed bacterial cells. This antibody is specific for the TR beta-1 isoform.

MA1-216 has been successfully used in Western blot, immunocytochemistry, immunoprecipitation and gel shift procedures. By Western blot, this antibody detects a 52 and a 55 kDa protein representing recombinant TR expressed in E. coli. The two different sizes represent two different translational starting points. Immunocytochemical staining of TR beta-1 in intact GH3 cells with MA1-216 results in nuclear staining. When levels of expression of the transfected receptor are high, cytoplasmic staining is seen along with nuclear staining. Immunoprecipitation and gel super shift experiments show that MA1-216 reacts with the unliganded, liganded, and DNA binding forms of the receptor.

The MA1-216 immunogen is purified human TR beta-1 overexpressed in E. coli. This antibody recognizes an epitope in the A /B domain of human TR beta-1, amino acid residues 1-101.

THRB Antibody (MA1-216) in IHC (P)

Immunohistochemistry analysis of Thyroid Hormone Receptor beta-1 showing staining in the nucleus and weak staining in the cytoplasm of paraffin-embedded human colon tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a Thyroid Hormone Receptor beta-1 Mouse Monoclonal Antibody (Product # MA1-216) diluted in 3% BSA-PBS at a dilution of 1:20 for 1 hour at 37°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



THRB Antibody (MA1-216) in IHC (P)

Immunohistochemistry was performed on normal biopsies of deparaffinized Human thyroid tissue. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer, microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature and probed with a Thyroid Hormone Receptor beta-1 monoclonal antibody (Product # MA1-216) at a dilution of 1:20 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

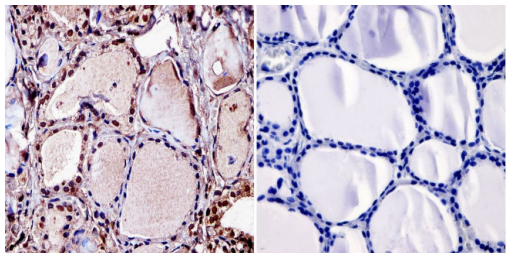
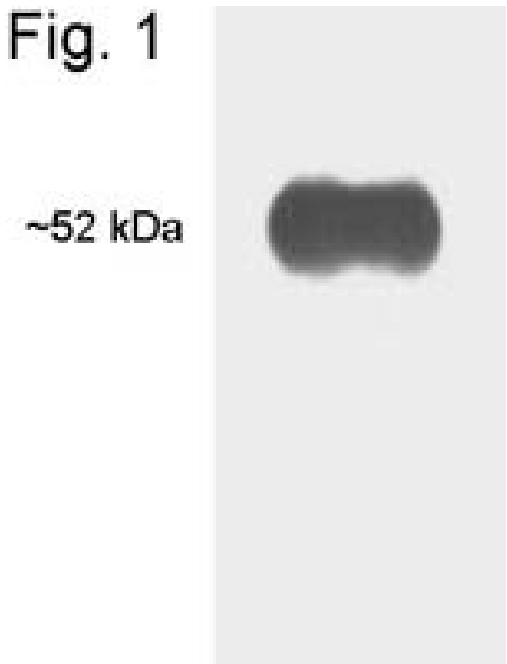


Fig. 1

THRB Antibody (MA1-216) in WB

Western blot of human thyroid hormone receptor beta-1 using Product # MA1-216.



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Western Blot (21)

<p>Journal of clinical medicine</p> <p>Changes in Thyroid Hormone Signaling Mediate Cardiac Dysfunction in the Tg197 Mouse Model of Arthritis: Potential Therapeutic Implications.</p> <p>"Published figure using THRB monoclonal antibody (Product # MA1-216) in Western Blot"</p> <p>Authors: Ntari L,Mantzouratou P,Katsaouni A,Pantos C,Kollias G,Mourouzis I</p>	<p>Year</p> <p>2021</p>
<p>Communications biology</p> <p>Low striatal T3 is implicated in inattention and memory impairment in an ADHD mouse model overexpressing thyroid hormone-responsive protein.</p> <p>"Published figure using THRB monoclonal antibody (Product # MA1-216) in Western Blot"</p> <p>Authors: Custodio RJP,Kim M,Sayson LV,Lee HJ,Ortiz DM,Kim BN,Kim HJ,Cheong JH</p>	<p>Year</p> <p>2021</p>

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Immunohistochemistry (2)

<p>Histochemistry and cell biology</p> <p>Triiodothyronine accelerates differentiation of rat liver progenitor cells into hepatocytes.</p> <p>"MA1-216 was used in immunohistochemistry to investigate the effect of triiodothyronine on rat liver hepatocyte development"</p> <p>Authors: László V,Dezso K,Baghy K,Papp V,Kovalszky I,Sáfrány G,Thorgeirsson SS,Nagy P,Paku S</p>	<p>Year</p> <p>2008</p> <p>Species</p> <p>Rat</p> <p>Dilution</p> <p>1:10</p>
<p>Bone</p> <p>Thyroid status affects number and localization of thyroid hormone receptor expressing mast cells in bone marrow.</p> <p>"MA1-216 was used in immunohistochemistry to investigate the association between thyroid status and thyroid hormone receptor expressing mast cells"</p> <p>Authors: Siebler T,Robson H,Bromley M,Stevens DA,Shalet SM,Williams GR</p>	<p>Year</p> <p>2002</p> <p>Species</p> <p>Rat</p> <p>Dilution</p> <p>1:100</p>

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- ICC/IF (1)
- IP (1)
- ChIP (5)
- GS (1)

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