

TR β 1 (E-17): sc-34132

BACKGROUND

Thyroid hormone nuclear receptors (TRs) are ligand-dependent transcription factors which regulate growth, differentiation and development, and represent members of the steroid/retinoic acid superfamily. The two genes encoding TRs identified to date, TR α and TR β , have been mapped to human chromosomes 17 and 3, respectively. TRs bind to thyroid hormone response elements (TREs) with half-site binding motifs in the orientation of palindromes, direct repeats or inverted palindromes. The affinities of binding are both variable and influenced differentially by 3,5,3'-triiodo-L-thyronine (T3). Transcriptional regulation by TRs is also modulated by heterodimerization with TR nuclear accessory proteins, the most extensively characterized of which are the retinoid X receptors (RXR α , RXR β and RXR γ). The TR β isoform TR β 1 forms a complex with the PI 3-kinase p85 α subunit and plays an important role in the T3-induced activation of Akt in pancreatic β cells.

CHROMOSOMAL LOCATION

Genetic locus: THRB (human) mapping to 3p24.2; Thrb (mouse) mapping to 14 A2.

SOURCE

TR β 1 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TR β 1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34132 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-34132 X, 200 μ g/0.1 ml.

APPLICATIONS

TR β 1 (E-17) is recommended for detection of TR β 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TR β 1 (E-17) is also recommended for detection of TR β 1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TR β 1 siRNA (h): sc-38890, TR β 1 siRNA (m): sc-38891, TR β 1 shRNA Plasmid (h): sc-38890-SH, TR β 1 shRNA Plasmid (m): sc-38891-SH, TR β 1 shRNA (h) Lentiviral Particles: sc-38890-V and TR β 1 shRNA (m) Lentiviral Particles: sc-38891-V.

TR β 1 (E-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

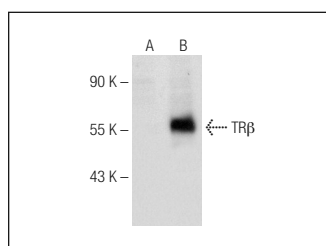
Molecular Weight of TR β 1: 55 kDa.

Positive Controls: TR β 1 (h): 293T Lysate: sc-369818, C32 nuclear extract: sc-2136 or C32 whole cell lysate: sc-2205.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TR β 1 (E-17): sc-34132. Western blot analysis of TR β expression in non-transfected: sc-117752 (A) and human TR β transfected: sc-369818 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **TR β 1 (J51): sc-737** or **TR β 1 (J52): sc-738**, our highly recommended monoclonal alternatives to TR β 1 (E-17). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TR β 1 (J51): sc-737**.