TRAP230 (R-17): sc-5375



The Power to Question

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight coactivating complexes that mediate signaling between transcriptional activators and initiation factors. These complexes include the thyroid hormone receptor-associated protein (TRAP) complex, which interacts with thyroid receptors (TR), vitamin D receptors and other steroid receptors to facilitate hormone induced transcriptional activation. The TRAP complex consists of numerous proteins ranging in size from 20 to 240 kDa, including TRAP95, TRAP100, TRAP150, TRAP220 and TRAP230, and they are characterized by the presence of a nuclear receptor recognition motif, which mediates the ligand-dependent binding of TRAP proteins to the nuclear receptors. TRAP220 and TRAP100 are widely expressed and most abundantly detected in skeletal muscle, heart and placenta. TRAP95, TRAP150 and TRAP230 facilitate TR induced transcription by associating with an additional transcriptional coactivating complex SMCC (SRB and MED protein cofactor complex), which consists of various subunits that share homology with several components of the yeast transcriptional mediator complexes.

REFERENCES

- Yuan, C.X., et al. 1998. The TRAP220 component of a thyroid hormone receptor-associated protein (TRAP) coactivator complex interacts directly with nuclear receptors in a ligand-dependent fashion. Proc. Natl. Acad. Sci. USA 95: 7939-7944.
- Jiang, Y.W., et al. 1998. Mammalian mediator of transcriptional regulation and its possible role as an end-point of signal transduction pathways. Proc. Natl. Acad. Sci. USA 95: 8538-8543.
- Treuter, E., et al. 1999. Competition between thyroid hormone receptorassociated protein (TRAP) 220 and transcriptional intermediary factor (TIF) 2 for binding to nuclear receptors. Implications for the recruitment of TRAP and p160 coactivator complexes. J. Biol. Chem. 274: 6667-6677.
- Kumar, R., et al. 1999. The structure of the nuclear hormone receptors. Steroids 64: 310-319.

CHROMOSOMAL LOCATION

Genetic locus: MED12 (human) mapping to Xq13.1.

SOURCE

TRAP230 (R-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRAP230 of human origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-5375 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-5375 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

TRAP230 (R-17) is recommended for detection of TRAP230 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], 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).

TRAP230 (R-17) is also recommended for detection of TRAP230 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TRAP230 siRNA (h): sc-38595; and as shRNA Plasmid control antibody for TRAP230 shRNA Plasmid (h): sc-38595-SH.

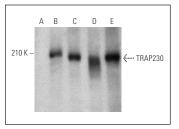
TRAP230 (R-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: TRAP230 (h): 293T Lysate: sc-371990, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



TRAP230 (R-17): sc-5375. Western blot analysis of TRAP230 expression in non-transfected 293T: sc-117752 (A), human TRAP230 transfected 293T: sc-371990 (B), HeLa (C), Jurkat (D) and HEK293 (E) 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.

PROTOCOLS

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