# TRAP220 (S-19): sc-5335



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 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.

#### **CHROMOSOMAL LOCATION**

Genetic locus: MED1 (human) mapping to 17q12; Med1 (mouse) mapping to 11 D.

## **SOURCE**

TRAP220 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TRAP220 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-5335 P, (100  $\mu g$  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-5335 X, 200  $\mu$ g/0.1 ml.

#### **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.

#### **APPLICATIONS**

TRAP220 (S-19) is recommended for detection of TRAP220 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

TRAP220 (S-19) is also recommended for detection of TRAP220 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRAP220 siRNA (h): sc-38593, TRAP220 siRNA (m): sc-38594, TRAP220 shRNA Plasmid (h): sc-38593-SH, TRAP220 shRNA Plasmid (m): sc-38594-SH, TRAP220 shRNA (h) Lentiviral Particles: sc-38593-V and TRAP220 shRNA (m) Lentiviral Particles: sc-38594-V.

TRAP220 (S-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TRAP220: 220 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Sol8 cell lysate: sc-2249 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.

# **SELECT PRODUCT CITATIONS**

- Metivier, R., et al. 2003. Estrogen receptor-α directs ordered, cyclical, and combinatorial recruitment of cofactors on a natural target promoter. Cell 115: 751-763.
- Feige, J., et al. 2007. The endocrine disruptor monoethyl-hexyl-phthalate is a selective peroxisome proliferator-activated receptor γ modulator that promotes adipogenesis. J. Biol. Chem. 282: 19152-19166.
- Magklara, A., et al. 2009. A composite intronic element directs dynamic binding of the progesterone receptor and GATA-2. Mol. Endocrinol. 23: 61-73.



Try TRAP220 (H-7): sc-74475 or TRAP220 (B-4): sc-514935, our highly recommended monoclonal alternatives to TRAP220 (S-19).