## SANTA CRUZ BIOTECHNOLOGY, INC.

# THAP10 (A-14): sc-160861



#### BACKGROUND

Members of the THAP (thanatos-associated protein) family of proteins contain a well conserved DNA-binding domain designated THAP-type zinc finger motif. Proteins containing the THAP-type zinc finger motif are commonly involved in transcriptional regulation, cell-cycle control, apoptosis and chromatin modification. The THAP-type zinc finger domain is suggested to have similarities with the site-specific DNA-binding domain (DBD) of *Drosophila* P element transposase. The conservation of the C2CH signature of residues, (Cys-Xaa(2-4)-Cys-Xaa(35-50)-Cys-Xaa(2)-His), define the THAP domain. THAP10 (THAP domain containing 10) is a 257 amino acid protein containing one THAP-type zinc finger and is encoded by a gene located on human chromosome 15q23.

## REFERENCES

- 1. Roussigne, M., et al. 2003. THAP1 is a nuclear proapoptotic factor that links prostate-apoptosis-response-4 (Par-4) to PML nuclear bodies. Oncogene 22: 2432-2442.
- 2. Roussigne, M., et al. 2003. The THAP domain: a novel protein motif with similarity to the DNA-binding domain of P element transposase. Trends Biochem. Sci. 28: 66-69.
- MacFarlan, T., et al. 2005. Human THAP7 is a chromatin-associated, histone tail-binding protein that represses transcription via recruitment of HDAC3 and nuclear hormone receptor corepressor. J. Biol. Chem. 280: 7346-7358.
- Clouaire, T., et al. 2005. The THAP domain of THAP1 is a large C2CH module with zinc-dependent sequence-specific DNA-binding activity. Proc. Natl. Acad. Sci. USA 102: 6907-6912.
- Liew, C.K., et al. 2007. Solution structure of the THAP domain from *Caenorhabditis elegans* C-terminal binding protein (CtBP). J. Mol. Biol. 366: 382-390.
- Bessière, D., et al. 2008. Structure-function analysis of the THAP zinc finger of THAP1, a large C2CH DNA-binding module linked to Rb/E2F pathways. J. Biol. Chem. 283: 4352-4363.
- Balakrishnan, M.P., et al. 2009. THAP5 is a human cardiac-specific inhibitor of cell cycle that is cleaved by the proapoptotic Omi/HtrA2 protease during cell death. Am. J. Physiol. Heart Circ. Physiol. 297: H643-H653.
- 8. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612538. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

#### CHROMOSOMAL LOCATION

Genetic locus: THAP10 (human) mapping to 15q23.

#### SOURCE

THAP10 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of THAP10 of human origin.

## **RESEARCH USE**

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

## 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-160861 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

THAP10 (A-14) is recommended for detection of THAP10 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); non cross-reactive with other THAP family members.

Suitable for use as control antibody for THAP10 siRNA (h): sc-89977, THAP10 shRNA Plasmid (h): sc-89977-SH and THAP10 shRNA (h) Lentiviral Particles: sc-89977-V.

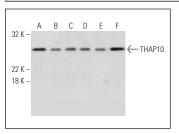
Molecular Weight of THAP10: 28 kDa.

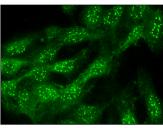
Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or IMR-32 nuclear extract: sc-2148.

## **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





THAP10 (A-14): sc-160861. Western blot analysis of THAP10 expression in HeLa (A), Jurkat (B), Hep G2 (C), IMR-32 (D), SK-N-MC (E) and SK-BR-3 (F) nuclear extracts. THAP10 (A-14): sc-160861. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear and cytoplasmic localization.

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.