

# THAP10 (G-14): sc-160862

## 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

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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.
3. 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.
4. 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.
5. 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.
6. Bessièrè, 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.
7. 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.
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## STORAGE

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

## CHROMOSOMAL LOCATION

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

## SOURCE

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-160862 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

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

THAP10 (G-14) is also recommended for detection of THAP10 in additional species, including canine and porcine.

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 whole cell lysate: sc-2200.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.