

THAP2 (E-15): sc-139081

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. THAP2 (THAP domain containing, apoptosis associated protein 2) is a 228 amino acid protein that contains one THAP-type zinc finger and is encoded by a gene mapping to human chromosome 12q21.1.

REFERENCES

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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.
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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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CHROMOSOMAL LOCATION

Genetic locus: THAP2 (human) mapping to 12q21.1; Thap2 (mouse) mapping to 10 D2.

SOURCE

THAP2 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of THAP2 of human origin.

RESEARCH USE

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

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-139081 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

THAP2 (E-15) is recommended for detection of THAP2 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); non cross-reactive with other THAP family members.

THAP2 (E-15) is also recommended for detection of THAP2 in additional species, including canine and porcine.

Suitable for use as control antibody for THAP2 siRNA (h): sc-95895, THAP2 siRNA (m): sc-154246, THAP2 shRNA Plasmid (h): sc-95895-SH, THAP2 shRNA Plasmid (m): sc-154246-SH, THAP2 shRNA (h) Lentiviral Particles: sc-95895-V and THAP2 shRNA (m) Lentiviral Particles: sc-154246-V.

Molecular Weight of THAP2: 26 kDa.

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.

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.