

THAP1 (3H3): sc-135578

BACKGROUND

THAP1 (THAP domain containing, apoptosis associated protein 1) is a 213 amino acid protein that localizes to the nucleoplasm and contains one THAP-type zinc finger, a conserved DNA-binding domain. Interacting with PAR4, THAP1 functions as a pro-apoptotic protein that acts in a zinc-dependent manner and enhances the likelihood of both TNF- and serum withdrawal-induced apoptosis, possibly playing a role in promyelocytic leukemia. The gene encoding THAP1 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: THAP1 (human) mapping to 8p11.21.

SOURCE

THAP1 (3H3) is a mouse monoclonal antibody raised against recombinant THAP1 protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

THAP1 (3H3) is recommended for detection of THAP1 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for THAP1 siRNA (h): sc-77834, THAP1 shRNA Plasmid (h): sc-77834-SH and THAP1 shRNA (h) Lentiviral Particles: sc-77834-V.

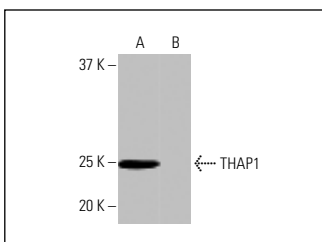
Molecular Weight of THAP1: 25 kDa.

Positive Controls: human THAP1 transfected 293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



THAP1 (3H3): sc-135578. Western blot analysis of THAP1 expression in human THAP1 transfected (A) and non-transfected (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Ortiz-Virumbrales, M., Ruiz, M., Hone, E., Dolios, G., Wang, R., Morant, A., Kottwitz, J., Ozelius, L.J., Gandy, S. and Ehrlich, M.E. 2014. Dystonia type 6 gene product Thap1: identification of a 50 kDa DNA-binding species in neuronal nuclear fractions. *Acta Neuropathol. Commun.* 2: 139.

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.

PROTOCOLS

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