

DNTTIP2 (N-20): sc-242592

BACKGROUND

DNTTIP2 (deoxynucleotidyltransferase terminal-interacting protein 2), also known as ERBP (estrogen receptor-binding protein), FCF2 or TdIF2 (terminal deoxynucleotidyltransferase-interacting factor 2), is a 756 amino acid nuclear protein. Widely expressed, with highest levels in testis, DNTTIP2 controls the transcriptional activity of TdT and ER α . DNTTIP2 forms a ternary complex with TdT and core histones. DNTTIP2 may also function as a chromatin remodeling protein. DNTTIP2 is encoded by a gene that maps to human chromosome 1, which is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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5. Bu, H., et al. 2004. ERBP, a novel estrogen receptor binding protein enhancing the activity of estrogen receptor. *Biochem. Biophys. Res. Commun.* 317: 54-59.
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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: DNTTIP2 (human) mapping to 1p22.1.

SOURCE

DNTTIP2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DNTTIP2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-242592 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DNTTIP2 (N-20) is recommended for detection of DNTTIP2 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).

Suitable for use as control antibody for DNTTIP2 siRNA (h): sc-88170, DNTTIP2 shRNA Plasmid (h): sc-88170-SH and DNTTIP2 shRNA (h) Lentiviral Particles: sc-88170-V.

Molecular Weight of DNTTIP2: 85 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.