

NUDT17 (V-21): sc-133856

BACKGROUND

NUDT17 (nudix (nucleoside diphosphate linked moiety X)-type motif 17) is a member of the Nudix hydrolase family of pyrophosphatases. Nudix hydrolases contain a characteristic Nudix domain and are responsible for catalyzing the hydrolysis of nucleoside diphosphate derivatives. NUDT17 is a 328 amino acid protein that uses magnesium or manganese as a cofactor. The gene encoding NUDT17 maps to human chromosome 1, the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. Approximately 3,000 genes are located on chromosome 1, which include several disease genes. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A as well as Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

1. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
2. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. *Anticancer Res.* 26: 953-959.
3. Lans, H. and Hoeijmakers, J.H. 2006. Cell biology: ageing nucleus gets out of shape. *Nature* 440: 32-34.
4. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. *Nature* 441: 315-321.
5. McClintock, D., et al. 2006. Hutchinson-Gilford progeria mutant lamin A primarily targets human vascular cells as detected by an anti-Lamin A G608G antibody. *Proc. Natl. Acad. Sci. USA* 103: 2154-2159.
6. Scaffidi, P. and Misteli, T. 2006. Lamin A-dependent nuclear defects in human aging. *Science* 312: 1059-1063.

CHROMOSOMAL LOCATION

Genetic locus: NUDT17 (human) mapping to 1q21.1.

SOURCE

NUDT17 (V-21) is an affinity purified rabbit polyclonal antibody raised against synthetic NUDT17 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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.

APPLICATIONS

NUDT17 (V-21) is recommended for detection of NUDT17 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).

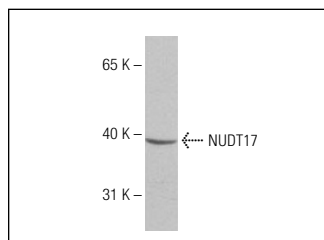
Suitable for use as control antibody for NUDT17 siRNA (h): sc-78785, NUDT17 shRNA Plasmid (h): sc-78785-SH and NUDT17 shRNA (h) Lentiviral Particles: sc-78785-V.

Molecular Weight of NUDT17: 36 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



NUDT17 (V-21): sc-133856. Western blot analysis of NUDT17 expression in Hep G2 whole cell lysate.

RESEARCH USE

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