SANTA CRUZ BIOTECHNOLOGY, INC.

NUDT22 (B-2): sc-393409

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NUDT22 (nudix (nucleoside diphosphate linked moiety X)-type motif 22) 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. NUDT22 is a 303 amino acid protein that lacks the nudix box, therefore lacking hydrolase activity. The gene encoding NUDT17 maps to human chromosome 11, which makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and β thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene.

REFERENCES

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4. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500.
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CHROMOSOMAL LOCATION

Genetic locus: NUDT22 (human) mapping to 11q13.1; Nudt22 (mouse) mapping to 19 A.

SOURCE

NUDT22 (B-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 22-39 near the N-terminus of NUDT22 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-393409 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

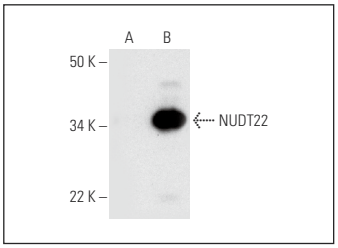
NUDT22 (B-2) is recommended for detection of NUDT22 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 NUDT22 siRNA (h): sc-96311, NUDT22 siRNA (m): sc-150110, NUDT22 shRNA Plasmid (h): sc-96311-SH, NUDT22 shRNA Plasmid (m): sc-150110-SH, NUDT22 shRNA (h) Lentiviral Particles: sc-96311-V and NUDT22 shRNA (m) Lentiviral Particles: sc-150110-V.

Molecular Weight of NUDT22: 33/23 kDa.

Positive Controls: NUDT22 (m): 293T Lysate: sc-122162.

DATA



NUDT22 (B-2): sc-393409. Western blot analysis of NUDT22 expression in non-transfected: sc-117752 (**A**) and mouse NUDT22 transfected: sc-122162 (**B**) 293T whole cell lysates.

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.