SANTA CRUZ BIOTECHNOLOGY, INC.

NUDT22 (D-12): sc-109345

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.

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RESEARCH USE

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

CHROMOSOMAL LOCATION

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

SOURCE

NUDT22 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NUDT22 of human origin.

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-109345 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NUDT22 (D-12) is recommended for detection of NUDT22 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).

NUDT22 (D-12) is also recommended for detection of NUDT22 in additional species, including equine, canine, bovine and porcine.

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.

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.