

# NUDT15 (G-17): sc-84533

## BACKGROUND

NUDT15 (nudix (nucleoside diphosphate linked moiety X)-type motif 15), also known as MTH2, is a 164 amino acid protein that belongs to the nudix hydrolyase family and uses magnesium as a cofactor to catalyze the conversion of 8-oxo-dGTP to 8-oxo-dGMP and diphosphate. Via its catalytic activity, NUDT15 mediates the hydrolysis of select nucleoside diphosphate derivatives and may play a role in the prevention of DNA transversions. The gene encoding NUDT15 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. As with most chromosomes, polysomy of part or all of chromosome 13 is deleterious to development and decreases the odds of survival. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NUDT15 (human) mapping to 13q14.2; Nudt15 (mouse) mapping to 14 D3.

## RESEARCH USE

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

## SOURCE

NUDT15 (G-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of NUDT15 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84533 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NUDT15 (G-17) is recommended for detection of NUDT15 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).

NUDT15 (G-17) is also recommended for detection of NUDT15 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NUDT15 siRNA (h): sc-75972, NUDT15 siRNA (m): sc-150105, NUDT15 shRNA Plasmid (h): sc-75972-SH, NUDT15 shRNA Plasmid (m): sc-150105-SH, NUDT15 shRNA (h) Lentiviral Particles: sc-75972-V and NUDT15 shRNA (m) Lentiviral Particles: sc-150105-V.

Molecular Weight of NUDT15: 19 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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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](http://www.scbt.com) or our catalog for detailed protocols and support products.