

# NUDT18 (K-16): sc-98052

## BACKGROUND

NUDT18 (nudix (nucleoside diphosphate linked moiety X)-type motif 18) is a 323 amino acid protein that contains one nudix hydrolase domain and belongs to the nudix hydrolase family. Using magnesium or manganese as cofactors, NUDT18 is thought to mediate the hydrolysis of select nucleoside diphosphate derivatives. Multiple isoforms of NUDT18 exist due to alternative splicing events. The gene encoding NUDT18 maps to human chromosome 8, which encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

## REFERENCES

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- Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
- Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
- Adam, P.J., et al. 2003. Comprehensive proteomic analysis of breast cancer cell membranes reveals unique proteins with potential roles in clinical cancer. *J. Biol. Chem.* 278: 6482-6489.
- Huang, X.P., et al. 2006. Negative implication of c-Myc as an amplification target in esophageal cancer. *Cancer Genet. Cytogenet.* 165: 20-24.
- van Duin, M., et al. 2007. High-resolution array comparative genomic hybridization of chromosome 8q: evaluation of putative progression markers for gastroesophageal junction adenocarcinomas. *Cytogenet. Genome Res.* 118: 130-137.

## CHROMOSOMAL LOCATION

Genetic locus: NUDT18 (human) mapping to 8p21.3; Nudt18 (mouse) mapping to 14 D2.

## SOURCE

NUDT18 (K-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NUDT18 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-98052 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

NUDT18 (K-16) is recommended for detection of NUDT18 of mouse, rat and 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)], 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).

NUDT18 (K-16) is also recommended for detection of NUDT18 in additional species, including canine and porcine.

Suitable for use as control antibody for NUDT18 siRNA (h): sc-77648, NUDT18 siRNA (m): sc-150108, NUDT18 shRNA Plasmid (h): sc-77648-SH, NUDT18 shRNA Plasmid (m): sc-150108-SH, NUDT18 shRNA (h) Lentiviral Particles: sc-77648-V and NUDT18 shRNA (m) Lentiviral Particles: sc-150108-V.

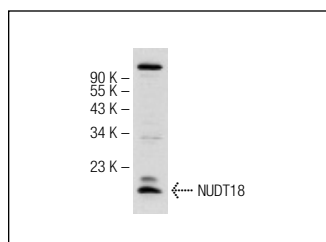
Molecular Weight of NUDT18: 35 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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). 3) 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.

## DATA



NUDT18 (K-16): sc-98052. Western blot analysis of NUDT18 expression in HeLa whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.