NUDT3 (E-12): sc-107828



The Power to Question

BACKGROUND

NUDT3 (nudix (nucleoside diphosphate linked moiety X)-type motif 3), also known as DIPP, DIPP1 (diphosphoinositol polyphosphate phosphohydrolase 1) or diadenosine 5',5"'-P1,P6-hexaphosphate hydrolase 1, is a 172 amino acid cytoplasmic protein belonging to the nudix hydrolase family and DIPP subfamily. Suggested to play a role in signal transduction, NUDT3 acts as a negative regulator of the ERK 1/2 pathway and hydrolyzes 5-phosphoribose 1-diphosphate. Existing as a monomer and known to bind magnesium as a cofactor, NUDT3 is widely expressed but found at highest levels in liver, pancreas, brain and heart. NUDT3 is inhibited by IP6K1 and fluoride, and is encoded by a gene that maps to human chromosome 6p21.31.

CHROMOSOMAL LOCATION

Genetic locus: NUDT3 (human) mapping to 6p21.31; Nudt3 (mouse) mapping to 17 A3.3.

SOURCE

NUDT3 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NUDT3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-107828 P, (100 μ g 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.

RESEARCH USE

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

APPLICATIONS

NUDT3 (E-12) is recommended for detection of NUDT3 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); non cross-reactive with other NUDT family members.

NUDT3 (E-12) is also recommended for detection of NUDT3 in additional species, including bovine and porcine.

Suitable for use as control antibody for NUDT3 siRNA (h): sc-95560, NUDT3 siRNA (m): sc-150111, NUDT3 shRNA Plasmid (h): sc-95560-SH, NUDT3 shRNA Plasmid (m): sc-150111-SH, NUDT3 shRNA (h) Lentiviral Particles: sc-95560-V and NUDT3 shRNA (m) Lentiviral Particles: sc-150111-V.

Molecular Weight of NUDT3: 19 kDa.

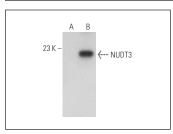
Positive Controls: NUDT3 (h): 293T Lysate: sc-173128 or SK-MEL-28 cell

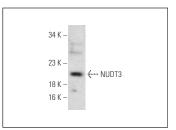
lysate: sc-2236.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA





NUDT3 (E-12): sc-107828. Western blot analysis of NUDT3 expression in non-transfected: sc-117752 (A) and human NUDT3 transfected: sc-173128 (B) 293T whole cell lysates

NUDT3 (E-12): sc-107828. Western blot analysis of NUDT3 expression in SK-MEL-28 whole cell lysate.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **NUDT3/4/10/11 (B-8): sc-398923**, our highly recommended monoclonal alternative to NUDT3 (E-12).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com