

NNMT (N-14): sc-48613

BACKGROUND

Nicotinamide N-methyltransferase (NNMT) catalyzes the N-methylation of nicotinamide and other pyridines. NNMT activity in the human liver has a bimodal frequency distribution, indicating that its enzyme activity may be modulated through a genetic polymorphism, which could have functional implications for individual differences in drug and xenobiotic toxicity. The gene that encodes human NNMT is approximately 16.5 kb in length, consists of three exons and two introns and maps to 11q23.2. NNMT isolated from the human liver was determined to be 969 nucleotides in length, with a 792 nucleotide open reading frame that encodes a 264 amino acid protein. The NNMT gene is presumed to be a significant genetic determinant of plasma homocysteine levels in Spanish families, since it encodes an enzyme involved in homocysteine synthesis.

CHROMOSOMAL LOCATION

Genetic locus: NNMT (human) mapping to 11q23.2; Nnmt (mouse) mapping to 9 A5.3.

SOURCE

NNMT (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NNMT 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48613 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-48613 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

NNMT (N-14) is recommended for detection of NNMT 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NNMT (N-14) is also recommended for detection of NNMT in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NNMT siRNA (h): sc-61213, NNMT siRNA (m): sc-61214, NNMT shRNA Plasmid (h): sc-61213-SH, NNMT shRNA Plasmid (m): sc-61214-SH, NNMT shRNA (h) Lentiviral Particles: sc-61213-V and NNMT shRNA (m) Lentiviral Particles: sc-61214-V.

NNMT (N-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

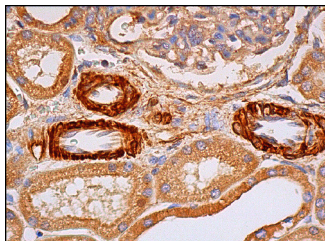
Molecular Weight of NNMT: 30 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



NNMT (N-14): sc-48613. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in glomeruli and cells in tubules.

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.

MONOS
Satisfaction
Guaranteed

Try **NNMT (G-4): sc-376048**, our highly recommended monoclonal alternative to NNMT (N-14).