SANTA CRUZ BIOTECHNOLOGY, INC.

NMT1 (P-18): sc-47213



BACKGROUND

N-terminal myristoylation is a cotranslational lipid modification, which is crucial for the targeting and function of many signaling proteins. The N-myristoyltransferases, NMT1 and NMT2, also known as glycylpeptide N-tetradecanoyltransferases, are cytoplasmic proteins that belong to the NMT family of proteins. The proteins in this familiy catalyze the addition of a myristoyl group to the N-terminal glycine residue of eukaryotic, fungal and viral proteins. They are primarily detected in heart, gut, kidney, liver and placenta.

REFERENCES

- 1. McIlhinney, R.A., et al. 1994. Characterization of a polyhistidine-tagged form of human myristoyl-CoA: protein N-myristoyltransferase produced in *Escherichia coli*. Eur. J. Biochem. 222: 137-146.
- 2. Weston, S.A., et al. 1998. Crystal structure of the anti-fungal target N-myristoyl transferase. Nat. Struct. Biol. 5: 213-221.

CHROMOSOMAL LOCATION

Genetic locus: NMT1 (human) mapping to 17q21.31; Nmt1 (mouse) mapping to 11 E1.

SOURCE

NMT1 (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NMT1 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-47213 P, (100 μ g 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

NMT1 (P-18) is recommended for detection of NMT1 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).

NMT1 (P-18) is also recommended for detection of NMT1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NMT1 siRNA (h): sc-61132, NMT1 siRNA (m): sc-61133, NMT1 shRNA Plasmid (h): sc-61132-SH, NMT1 shRNA Plasmid (m): sc-61133-SH, NMT1 shRNA (h) Lentiviral Particles: sc-61132-V and NMT1 shRNA (m) Lentiviral Particles: sc-61133-V.

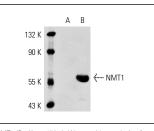
Molecular Weight of NMT1: 66 kDa.

Positive Controls: NMT1 (h): 293 Lysate: sc-110896, K-562 whole cell lysate: sc-2203 or mouse pancreas extract: sc-364244.

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



NMT1 (P-18): sc-47213. Western blot analysis of NMT1 expression in non-transfected: sc-110760 (A) and human NMT1 transfected: sc-110896 (B) 293 whole cell lysates

STORAGE

Store at 4° C, **D0 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 Satisfation Guaranteed

Try NMT1 (E-9): sc-393702 or NMT1 (B-11): sc-393744, our highly recommended monoclonal alternatives to NMT1 (P-18).