N-myristoyltransferase 1 (F-16): sc-47211



The Power to Question

BACKGROUND

N-terminal myristoylation is a cotranslational lipid modification, which is crucial for the targeting and function of many signaling proteins. The N-myristoyl-transferases, NMT1 and NMT2, also known as glycylpeptide N-tetradecanoyl-transferases, 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

- 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.
- 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

N-myristoyltransferase 1 (F-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of N-myristoyltransferase 1 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-47211 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NMT1 (F-16) 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 μ g per 100-500 μ g 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 (F-16) 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.

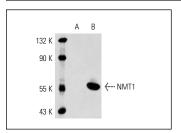
Molecular Weight of N-myristoyltransferase 1: 66 kDa.

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 (F-16): sc-47211. 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, **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.

PROTOCOLS

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



Try **NMT1 (E-9):** sc-393702 or **NMT1 (B-11):** sc-393744, our highly recommended monoclonal alternatives to NMT1 (F-16).

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