

# NMT1 (A-3): sc-365723

## 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 glycopeptide N-tetradecanoyltransferases, are cytoplasmic proteins that belong to the NMT family of proteins. The proteins in this family 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

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- Rajala, R.V., et al. 2002. Altered expression and localization of N-myristoyltransferase in experimentally induced rat model of ischemia-reperfusion. *J. Cell. Biochem.* 86: 509-519.
- Selvakumar, P., et al. 2004. Expression of methionine aminopeptidase 2, N-myristoyltransferase, and N-myristoyltransferase inhibitor protein 71 in HT29. *Biochem. Biophys. Res. Commun.* 322: 1012-1017.
- Sharma, R.K. 2004. Potential role of N-myristoyltransferase in pathogenic conditions. *Can. J. Physiol. Pharmacol.* 82: 849-859.
- Lu, Y., et al. 2005. Expression of N-myristoyltransferase in human brain tumors. *Neurochem. Res.* 30: 9-13.
- Yang, S.H., et al. 2005. N-myristoyltransferase 1 is essential in early mouse development. *J. Biol. Chem.* 280: 18990-18995.
- Price, H.P., et al. 2005. Functional analysis of TbARL1, an N-myristoylated Golgi protein essential for viability in bloodstream trypanosomes. *J. Cell Sci.* 118: 831-841.

## CHROMOSOMAL LOCATION

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

## SOURCE

NMT1 (A-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 352-381 near the C-terminus of NMT1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-365723 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

NMT1 (A-3) is recommended for detection of NMT1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 (A-3) is also recommended for detection of NMT1 in additional species, including equine, canine, bovine and porcine.

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.

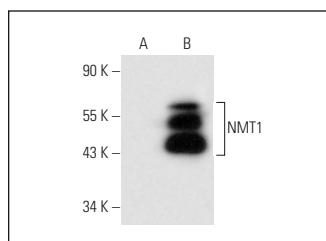
Molecular Weight of NMT1: 66 kDa.

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

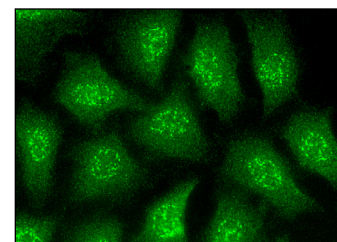
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



NMT1 (A-3): sc-365723. Western blot analysis of NMT1 expression in non-transfected: sc-110760 (A) and human NMT1 transfected: sc-110896 (B) 293 whole cell lysates.



NMT1 (A-3): sc-365723. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

## 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.