NMT1 (E-9): sc-393702

**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 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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

NMT1 (E-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 146-179 within an internal region of NMT1 of human origin.

**PRODUCT**

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

NMT1 (E-9) is available conjugated to agarose (sc-393702 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393702 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393702 PE), fluorescein (sc-393702 FITC), Alexa Fluor® 488 (sc-393702 AF488), Alexa Fluor® 546 (sc-393702 AF546), Alexa Fluor® 594 (sc-393702 AF594) or Alexa Fluor® 647 (sc-393702 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCMI, and to either Alexa Fluor® 680 (sc-393702 AF680) or Alexa Fluor® 790 (sc-393702 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCMI.

Blocking peptide available for competition studies, sc-393702 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

NMT1 (E-9) 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 (E-9) 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: DU 145 cell lysate: sc-2268, K-562 whole cell lysate: sc-2203 or A-10 cell lysate: sc-3806.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-358850.

**DATA**

![Western blot analysis of NMT1 expression in K-562](image1)

![Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization](image2)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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