

# DIMT1 (FL-313): sc-135130

## BACKGROUND

DIMT1 (DIM1 dimethyladenosine transferase 1), also known as DIMT1L or HUSSY-05, is a 313 amino acid protein that belongs to the rRNA adenine N6-methyltransferase family. Localized to the nucleolus, DIMT1 functions to dimethylate adjacent adenosines on the conserved hairpin loop of 18S rRNA in the 40S particle. The gene encoding DIMT1 maps to chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to cri du chat syndrome, while deletion of the q arm of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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- Law, S.F., et al. 1998. Cell cycle-regulated processing of HEF1 to multiple protein forms differentially targeted to multiple subcellular compartments. *Mol. Cell. Biol.* 18: 3540-3551.
- Stanchi, F., et al. 2001. Characterization of 16 novel human genes showing high similarity to yeast sequences. *Yeast* 18: 69-80.
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## CHROMOSOMAL LOCATION

Genetic locus: DIMT1L (human) mapping to 5q12.1; Dimt1l (mouse) mapping to 13 D2.1.

## SOURCE

DIMT1 (FL-313) is a rabbit polyclonal antibody raised against amino acids 1-313 representing full length DIMT1 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.

## APPLICATIONS

DIMT1 (FL-313) is recommended for detection of DIMT1 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).

DIMT1 (FL-313) is also recommended for detection of DIMT1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for DIMT1 siRNA (h): sc-91604, DIMT1 siRNA (m): sc-143041, DIMT1 shRNA Plasmid (h): sc-91604-SH, DIMT1 shRNA Plasmid (m): sc-143041-SH, DIMT1 shRNA (h) Lentiviral Particles: sc-91604-V and DIMT1 shRNA (m) Lentiviral Particles: sc-143041-V.

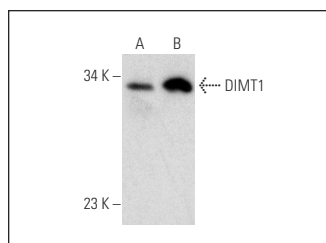
Molecular Weight of DIMT1: 35 kDa.

Positive Controls: T-47D cell lysate: sc-2293, NCI-H460 whole cell lysate: sc-364235 or SK-OV-3 whole cell lysate: sc-364229.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



DIMT1 (FL-313): sc-135130. Western blot analysis of DIMT1 expression in NCI-H460 (A) and SK-OV-3 (B) 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.