

TRMT6 (H-198): sc-98307

BACKGROUND

Transfer RNA (tRNA) modifications help regulate the efficiency of mRNA translation by maintaining the correct reading frames within mRNA. TRMT6 (tRNA methyltransferase 6), also known as GCD10 or TRM6, is a 497 amino acid protein that localizes to the nucleus and exists as a heterodimer with TRM61. Expressed in liver, brain, ovary and testis, TRMT6 functions as a substrate-binding subunit of tRNA and is thought to catalyze the formation of N(1)-methyladenine at position 58 in initiator methionyl-tRNA. TRMT6 exists as three alternatively spliced isoforms that, in response to DNA damage, may be phosphorylated by ATM or ATR. The gene encoding TRMT6 maps to human chromosome 20, which houses over 600 genes and comprises nearly 2% of the human genome.

REFERENCES

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3. Ozanick, S., Krecic, A., Andersland, J. and Anderson, J.T. 2005. The bipartite structure of the tRNA m1A58 methyltransferase from *S. cerevisiae* is conserved in humans. *RNA* 11: 1281-1290.
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CHROMOSOMAL LOCATION

Genetic locus: TRMT6 (human) mapping to 20p12.3; Trmt6 (mouse) mapping to 2 F2.

SOURCE

TRMT6 (H-198) is a rabbit polyclonal antibody raised against amino acids 154-349 mapping within an internal region of TRMT6 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.

STORAGE

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

APPLICATIONS

TRMT6 (H-198) is recommended for detection of TRMT6 of mouse 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).

Suitable for use as control antibody for TRMT6 siRNA (h): sc-76756, TRMT6 siRNA (m): sc-154685, TRMT6 shRNA Plasmid (h): sc-76756-SH, TRMT6 shRNA Plasmid (m): sc-154685-SH, TRMT6 shRNA (h) Lentiviral Particles: sc-76756-V and TRMT6 shRNA (m) Lentiviral Particles: sc-154685-V.

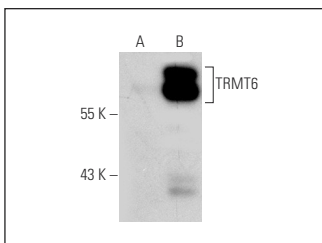
Molecular Weight of TRMT6: 56 kDa.

Positive Controls: TRMT6 (h): 293 Lysate: sc-110639.

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



TRMT6 (H-198): sc-98307. Western blot analysis of TRMT6 expression in non-transfected: sc-110760 (A) and human TRMT6 transfected: sc-110639 (B) 293 whole cell lysates.

RESEARCH USE

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

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Try **TRMT6 (F-3): sc-271752**, our highly recommended monoclonal alternative to TRMT6 (H-198).