TRMT1L (H-8): sc-515224



The Power to Question

BACKGROUND

Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes Lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

- Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. J. Exp. Med. 172: 263-272.
- 2. Sood, R., et al. 2001. Cloning and characterization of 13 novel transcripts and the human RGS8 gene from the 1q25 region encompassing the hereditary prostate cancer (HPC1) locus. Genomics 73: 211-222.
- Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611673. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: TRMT1L (human) mapping to 1q25.3; Trmt1l (mouse) mapping to 1 G2.

SOURCE

TRMT1L (H-8) is a mouse monoclonal antibody raised against amino acids 231-464 mapping within an internal region of TRMT1L of human origin.

PRODUCT

Each vial contains 200 $\mu g \ lgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRMT1L (H-8) is available conjugated to agarose (sc-515224 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515224 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515224 PE), fluorescein (sc-515224 FITC), Alexa Fluor* 488 (sc-515224 AF488), Alexa Fluor* 546 (sc-515224 AF546), Alexa Fluor* 594 (sc-515224 AF594) or Alexa Fluor* 647 (sc-515224 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-515224 AF680) or Alexa Fluor* 790 (sc-515224 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TRMT1L (H-8) is recommended for detection of TRMT1L 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).

Suitable for use as control antibody for TRMT1L siRNA (h): sc-78759, TRMT1L siRNA (m): sc-141840, TRMT1L shRNA Plasmid (h): sc-78759-SH, TRMT1L shRNA Plasmid (m): sc-141840-SH, TRMT1L shRNA (h) Lentiviral Particles: sc-78759-V and TRMT1L shRNA (m) Lentiviral Particles: sc-141840-V.

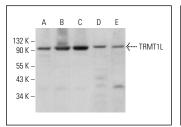
Molecular Weight of TRMT1L isoforms 1/2: 82/44 kDa.

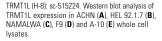
Positive Controls: HeLa nuclear extract: sc-2120, ACHN whole cell lysate: sc-364365 or human testis extract: sc-363781.

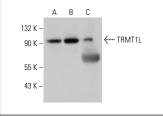
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgGκ BP-HRP: sc-516102 or m-lgGκ 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-lgGκ BP-FITC: sc-516140 or m-lgGκ 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







TRMT1L (H-8): sc-515224. Western blot analysis of TRMT1L expression in HeLa nuclear extract ($\bf A$), ACHN whole cell lysate ($\bf B$) and human testis tissue extract ($\bf C$).

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.

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