

METTL8 (S-15): sc-161850

BACKGROUND

METTL8 (methyltransferase like 8), also known as TIP, is a 291 amino acid cytoplasmic and nuclear protein that exists as multiple alternatively spliced isoforms and is thought to function as a methyltransferase. METTL8 is a member of the methyltransferase superfamily, which includes DNA methyltransferases (Dnmt), histone methyltransferases, catechol-O-methyl transferases and many others. Members of the methyltransferase superfamily have enzymatic activity that results in the transfer of a methyl group to and from DNA, RNA or amino acids. METTL8 is encoded by a gene located on human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
2. Avarello, R., et al. 1992. Evidence for an ancestral alphoid domain on the long arm of human chromosome 2. *Hum. Genet.* 89: 247-249.
3. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
4. Jakkaraju, S., et al. 2005. TIPs are tension-responsive proteins involved in myogenic versus adipogenic differentiation. *Dev. Cell.* 9: 39-49.
5. Hublitz, P., et al. 2009. Mechanisms of transcriptional repression by histone lysine methylation. *Int. J. Dev. Biol.* 53: 335-354.
6. Wu, S.C., Zhang, Y. 2009. Minireview: role of protein methylation and demethylation in nuclear hormone signaling. *Mol. Endocrinol.* 23: 1323-1334.
7. Liutkeviciute, Z., et al. 2009. Cytosine-5-methyltransferases add aldehydes to DNA. *Nat. Chem. Biol.* 5: 400-402.

CHROMOSOMAL LOCATION

Genetic locus: *Mettl8* (mouse) mapping to 2 C2.

SOURCE

METTL8 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of METTL8 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161850 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

METTL8 (S-15) is recommended for detection of METTL8 of mouse and rat 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); non cross-reactive with other METTL family members.

Suitable for use as control antibody for METTL8 siRNA (m): sc-149393, METTL8 shRNA Plasmid (m): sc-149393-SH and METTL8 shRNA (m) Lentiviral Particles: sc-149393-V.

Molecular Weight of (predicted) METTL8: 33 kDa.

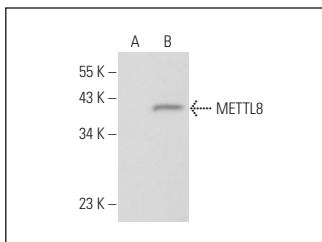
Molecular Weight of (observed) METTL8: 23 kDa.

Positive Controls: METTL8 (m2): 293T Lysate: sc-127148.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



METTL8 (S-15): sc-161850. Western blot analysis of METTL8 expression in non-transfected: sc-117752 (A) and mouse METTL8 transfected: sc-127148 (B) 293T whole cell lysates.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.