

METTL8 (E-15): sc-161848

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

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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.
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CHROMOSOMAL LOCATION

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

SOURCE

METTL8 (E-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-161848 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 (E-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 (predicted) of METTL8: 33 kDa.

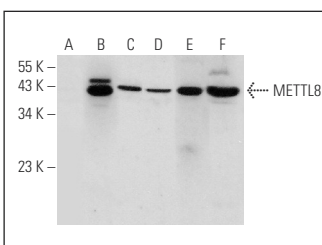
Molecular Weight (observed) of METTL8: 23 kDa.

Positive Controls: METTL8 (m2): 293T Lysate: sc-127148, RAW 264.7 whole cell lysate: sc-2211 or mouse brain extract: sc-2253.

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 (E-15): sc-161848. Western blot analysis of METTL8 expression in non-transfected 293T: sc-117752 (A), mouse METTL8 transfected 293T: sc-127148 (B), KNRK (C) and RAW 264.7 (D) whole cell lysates and mouse brain (E) and mouse heart (F) tissue extracts.

PROTOCOLS

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