

METTL10 (E-12): sc-138419

BACKGROUND

METTL10 (methyltransferase-like protein 10) is a 291 amino acid protein that belongs to the methyltransferase superfamily and is encoded by a gene that maps to human chromosome 10q26.13. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics*. 4: 1-15.
4. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
5. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. *Am. J. Surg. Pathol.* 32: 1258-1264.
6. Yin, Y., et al. 2008. PTEN: a new guardian of the genome. *Oncogene* 27: 5443-5453.
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CHROMOSOMAL LOCATION

Genetic locus: METTL10 (human) mapping to 10q26.13; Mettl10 (mouse) mapping to 7.

SOURCE

METTL10 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of METTL10 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.

Blocking peptide available for competition studies, sc-138419 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-138419 X, 200 µg/0.1 ml.

APPLICATIONS

METTL10 (E-12) is recommended for detection of METTL10 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 METTL10 siRNA (h): sc-90724, METTL10 siRNA (m): sc-149383, METTL10 shRNA Plasmid (h): sc-90724-SH, METTL10 shRNA Plasmid (m): sc-149383-SH, METTL10 shRNA (h) Lentiviral Particles: sc-90724-V and METTL10 shRNA (m) Lentiviral Particles: sc-149383-V.

METTL10 (E-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of METTL10: 32 kDa.

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) 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.

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.

PROTOCOLS

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