

METTL7B (E-14): sc-138421

BACKGROUND

METTL7B (methyltransferase-like protein 7B) is a 244 amino acid protein belonging to the methyltransferase superfamily. METTL7B is believed to have methyltransferase activity, wherein METTL7B catalyzes the transfer of a methyl group from one compound to another. The gene that encodes METTL7B maps to chromosome 12 which makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12 including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Chromosome 12 is also home to a homeobox gene cluster which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms varying in severity depending on the extent of mosaicism and is most severe in cases of complete trisomy.

CHROMOSOMAL LOCATION

Genetic locus: METTL7B (human) mapping to 12q13.2; Mettl7b (mouse) mapping to 10 D3.

SOURCE

METTL7B (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of METTL7B of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138421 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

METTL7B (E-14) is recommended for detection of METTL7B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with METTL7A.

METTL7B (E-14) is also recommended for detection of METTL7B in additional species, including canine and bovine.

Suitable for use as control antibody for METTL7B siRNA (h): sc-96008, METTL7B siRNA (m): sc-149392, METTL7B shRNA Plasmid (h): sc-96008-SH, METTL7B shRNA Plasmid (m): sc-149392-SH, METTL7B shRNA (h) Lentiviral Particles: sc-96008-V and METTL7B shRNA (m) Lentiviral Particles: sc-149392-V.

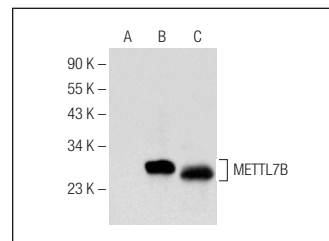
Molecular Weight of METTL7B: 28 kDa.

Positive Controls: METTL7B (h): 293T Lysate: sc-158726, mouse liver extract: sc-2256 or U-251-MG whole cell lysate: sc-364176.

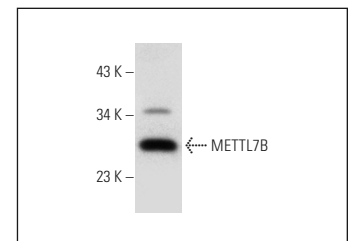
RECOMMENDED SECONDARY REAGENTS

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



METTL7B (E-14): sc-138421. Western blot analysis of METTL7B expression in non-transfected: sc-117752 (A) and human METTL7B transfected: sc-158726 (B) 293T whole cell lysates and mouse liver tissue extract (C).



METTL7B (E-14): sc-138421. Western blot analysis of METTL7B expression in U-251-MG whole cell lysate.

STORAGE

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

PROTOCOLS

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



Try **METTL7B (D-2): sc-398626** or **METTL7B (E-10): sc-515267**, our highly recommended monoclonal alternatives to METTL7B (E-14).