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MettL7A Antibody
Catalog # ASC10800

Specification

MettL7A Antibody - Product Information

Application	**WB, ICC**
Primary Accession	Q9H8H3
Other Accession	NP_054752, 89145417
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**MettL7A antibody can be used for detection of MettL7A by Western blot at 2 µg/mL. Antibody can also be used for immunocytochemistry starting at 2 µg/mL. For immunofluorescence start at 2 µg/mL.**

MettL7A Antibody - Additional Information

Gene ID **25840**

Target/Specificity
METTL7A; At least two isoforms of MettL7A are known to exist. This antibody is predicted to not cross-react with MettL7B.

Reconstitution & Storage
MettL7A antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
MettL7A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MettL7A Antibody - Protein Information

Name TMT1A {ECO:0000303|PubMed:37137720, ECO:0000312|HGNC:HGNC:24550}

Function
Thiol S-methyltransferase that catalyzes the transfer of a methyl group from S-adenosyl-L-methionine to alkyl and phenolic thiol- containing acceptor substrates. Together with TMT1B accounts for most of S-thiol methylation activity in the endoplasmic reticulum of hepatocytes (PubMed:37137720). Able to methylate the N6 position of adenosine residues in long non-coding RNAs (lncRNAs). May facilitate lncRNAs transfer into exosomes at the tumor-stroma interface (PubMed:34980213). Promotes osteogenic and odontogenic differentiation by regulating the expression of genes involved in stem cell differentiation and survival (PubMed:34226523, PubMed:<a

href="http://www.uniprot.org/citations/34790668" target="_blank">34790668). Targeted from the endoplasmic reticulum to lipid droplets, where it recruits cellular proteins to form functional organelles (PubMed:19773358).

Cellular Location
Lipid droplet. Endoplasmic reticulum. Membrane. Microsome Cytoplasm, cytosol. Note=Inserted in the ER membrane and migrates from the inserted site to lipid droplet

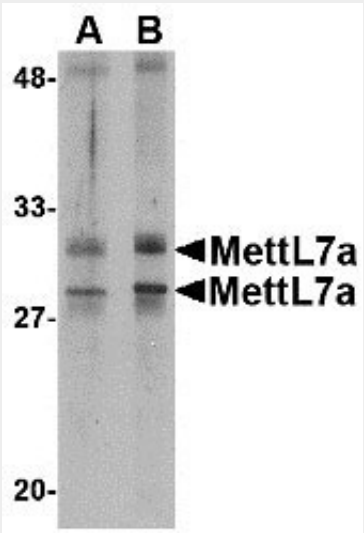
Tissue Location
Expressed in the liver.

MettL7A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MettL7A Antibody - Images



Western blot analysis of MettL7A in MCF cell lysate with MettL7A antibody at 2 µg/mL.

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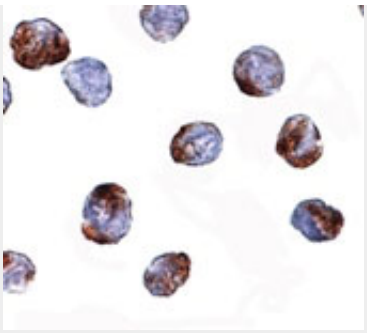

Immunocytochemistry of MettL7a in MCF7 cells with MettL7a antibody at 2 µg/mL.

MettL7A Antibody - Background

MettL7A Antibody: MettL7A belongs to the methyltransferase superfamily. It is a probable methyltransferase. Methyltransferase is a type of transferase enzyme which transfers a methyl group from a donor to an acceptor. Often methylation occurs on nucleic bases in DNA or amino acids in protein structures. DNA methylation is often utilized to silence and regulate genes without changing the original DNA sequence. DNA methylation may be necessary for normal growth from embryonic stages in mammals. When mutant embryonic stem cells lacking the murine DNA methyltransferase gene were introduced to a germline of mice they caused a recessive lethal phenotype. Methylation may also be linked to cancer development as methylation of tumor suppressor genes promotes tumorgenesis and metastasis.

MettL7A Antibody - References

Clark HF, Gurney AL, Abaya E, et al. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. Genome Res.2003; 13:2265-70.
Li E, Bestor TH, and Jaenisch R. Targeted mutation of the DNA methyltransferase gene results in embryonic lethality. Cell1992; 69:915-26.
Laird PW and Jaenisch R. DNA Methylation and Cancer. Human Molecular Genetics1994; 3:1487-95.