KINESISDx

TECHNICAL DATA SHEET

Cat No: Kab05139

Product Particulars: anti-METTL3-antibody

Pack Size: 100µg

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Purify: Immunogen affinity purified

Host: Rabbit

Isotype: IgG

Storage: PBS with 0.02% sodium azide and 50% glycerol pH 7.3 , -20℃ for 24 months (Avoid repeated freeze / thaw cycles.)

Background (Function): The METTL3-METTL14 heterodimer forms a N6- methyltransferase complex that methylates adenosine residues of some RNAs and regulates the circadian clock, differentiation of embryonic stem cells and primary miRNA processing (PubMed:22575960, PubMed:24284625, PubMed:25719671, PubMed:25799998, PubMed:26321680, PubMed:26593424, PubMed:27281194, PubMed:9409616). In the heterodimer formed with METTL14, METTL3 probably constitutes the catalytic core (PubMed:27281194). N6-methyladenosine (m6A), which takes place at the 5'-[AG]GAC-3' consensus sites of some mRNAs, plays a role in the efficiency of mRNA splicing, processing, translation efficiency, editing and mRNA stability (PubMed:22575960, PubMed:24284625, PubMed:25719671, PubMed:25799998, PubMed:26321680, PubMed:26593424, PubMed:9409616). M6A regulates the length of the circadian clock: acts as a early pace-setter in the circadian loop by putting mRNA production on a fast-track for facilitating nuclear processing, thereby providing an early point of control in setting the dynamics of the feedback loop (By similarity). M6A also acts as a regulator of mRNA stability: in embryonic stem cells (ESCs), m6A methylation of mRNAs encoding key naive pluripotency-promoting transcripts results in transcript destabilization, promoting differentiation of ESCs (By similarity). M6A also takes place in other RNA molecules, such as primary miRNA (pri-miRNAs) (PubMed:25799998). METTL3 also mediates methylation of pri-miRNAs, marking them for recognition and processing by DGCR8 (PubMed:25799998). Acts as a positive regulator of mRNA translation independently of the methyltransferase activity: promotes translation by interacting with the translation initiation machinery in the cytoplasm (PubMed:27117702). Its overexpression in a number of cancer cells suggests that it may participate to cancer cell proliferation by promoting mRNA translation (PubMed:27117702).

Immunogen: methyltransferase like 3

Synonyms: MTA70

Calculated MW:

Uniprot ID: Q86U44

Specificity: Human,Mouse ,Rat

Tested Application: ELISA,WB,IP

Recommended Dilution:

Gene ID: 56339

Gene Location: