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METTL14 Rabbit pAb

Catalog # AP99436

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9HCE5
Other Accession	Q9HCE5
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52150
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human METTL14
Epitope Specificity	21-120/456
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the MT-A70-like family.
SUBUNIT	Component of the WMM complex, a N6-methyltransferase complex composed of WTAP, METTL3 and METTL14.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Gene ID	57721
Other Names	hMETTL14; G430022H21Rik; mKIAA1627; RGD1304822; zgc:77296; MET14_HUMAN; METTL14; Methyltransferase-like protein 14 (hMETTL14); KIAA1627; MET14_MOUSE; Methyltransferase-like protein 14; MET14_DANRE; methyltransferase 14, N6-adenosine-methyltransferase non-catalytic subunit; methyltransferase like 14; methyltransferase 14, N6-adenosine-methyltransferase subunit
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	METTL14 (HGNC:29330)
Function	The METTL3-METTL14 heterodimer forms a N6-methyltransferase complex

that methylates adenosine residues at the N(6) position of some mRNAs and regulates the circadian clock, differentiation of embryonic stem cells and cortical neurogenesis (PubMed:24316715, PubMed:24407421, PubMed:25719671, PubMed:27281194, PubMed:27373337, PubMed:29348140). In the heterodimer formed with METTL3, METTL14 constitutes the RNA-binding scaffold that recognizes the substrate rather than the catalytic core (PubMed:27281194, PubMed:27373337, PubMed:27627798, PubMed:29348140). N6-methyladenosine (m6A), which takes place at the 5'-[AG]GAC-3' consensus sites of some mRNAs, plays a role in mRNA stability and processing (PubMed:24316715, PubMed:24407421, PubMed:25719671). M6A acts as a key regulator of mRNA stability by promoting mRNA destabilization and degradation (By similarity). In embryonic stem cells (ESCs), m6A methylation of mRNAs encoding key naive pluripotency- promoting transcripts results in transcript destabilization (By similarity). M6A regulates spermatogonial differentiation and meiosis and is essential for male fertility and spermatogenesis (By similarity). M6A also regulates cortical neurogenesis: m6A methylation of transcripts related to transcription factors, neural stem cells, the cell cycle and neuronal differentiation during brain development promotes their destabilization and decay, promoting differentiation of radial glial cells (By similarity).

Cellular Location Nucleus

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.