ARG43405
anti-METTL16 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes METTL16
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	METTL16
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 263-562 of Human METTL16 (NP_076991.3).
Conjugation	Un-conjugated
Alternate Names	Methyltransferase 10 domain-containing protein; METT10D; Methyltransferase-like protein 16; EC 2.1.1.-

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
IP	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	A549
Observed Size	~ 74 kDa

Properties

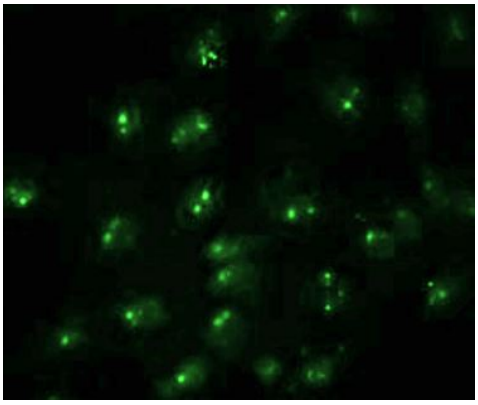
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

	cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

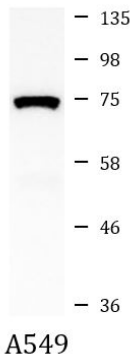
Gene Symbol	METTL16
Gene Full Name	methyltransferase like 16
Function	RNA N6-methyltransferase that methylates adenosine residues at the N(6) position of a subset of RNAs and is involved in S-adenosyl-L-methionine homeostasis by regulating expression of MAT2A transcripts (PubMed:28525753, PubMed:30197299, PubMed:30197297). Able to N6-methylate a subset of mRNAs and U6 small nuclear RNAs (U6 snRNAs) (PubMed:28525753). In contrast to the METTL3-METTL14 heterodimer, only able to methylate a limited number of RNAs: requires both a 5'UACAGAGAA-3' nonamer sequence and a specific RNA structure (PubMed:28525753, PubMed:30197299, PubMed:30197297). Plays a key role in S-adenosyl-L-methionine homeostasis by mediating N6-methylation of MAT2A mRNAs, altering splicing and/or stability of MAT2A transcripts: in presence of S-adenosyl-L-methionine, binds the 3'-UTR region of MAT2A mRNA and specifically N6-methylates the first hairpin of MAT2A mRNA, impairing MAT2A expression (PubMed:28525753). In S-adenosyl-L-methionine-limiting conditions, binds the 3'-UTR region of MAT2A mRNA but stalls due to the lack of a methyl donor, preventing N6-methylation and promoting expression of MAT2A (PubMed:28525753). In addition to mRNAs, also able to mediate N6-methylation of U6 small nuclear RNA (U6 snRNA): specifically N6-methylates adenine in position 43 of U6 snRNAs (PubMed:28525753, PubMed:29051200). Also able to bind various lncRNAs (PubMed:29051200). Specifically binds the 3'-end of the MALAT1 long non-coding RNA (PubMed:27872311). [UniProt]
Calculated Mw	64 kDa
Cellular Localization	Nucleus. [UniProt]

Images



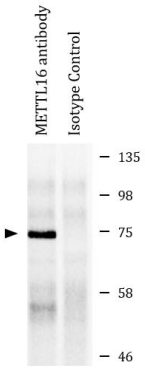
ARG43405 anti-METTL16 antibody ICC/IF image

Immunofluorescence: C6 cells stained with ARG43405 anti-METTL16 antibody at 1:100 dilution.



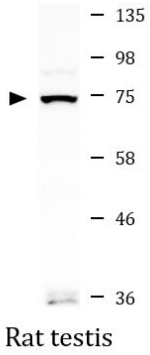
ARG43405 anti-METTL16 antibody WB image

Western blot: 25 µg of A549 cell lysate stained with ARG43405 anti-METTL16 antibody at 1:1000 dilution.



ARG43405 anti-METTL16 antibody IP image

Immunoprecipitation: 300 µg extracts of LNCaP cells were immunoprecipitated and stained with ARG43405 anti-METTL16 antibody at 1:1000 dilution.



ARG43405 anti-METTL16 antibody WB image

Western blot: 25 µg of Rat testis lysate stained with ARG43405 anti-METTL16 antibody at 1:1000 dilution.