

Rabbit anti-Human METTL3 Polyclonal Antibody | anti-METTL3 antibody

Anti-METTL3 Antibody

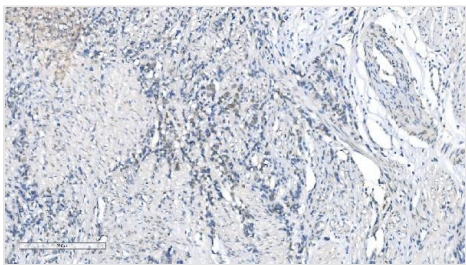
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19248	Rabbit	Human	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

METTL3; Polyclonal Antibody; Anti-METTL3 Antibody; N6-adenosine-methyltransferase catalytic subunit; methyltransferase like 3 ; anti-METTL3 antibody

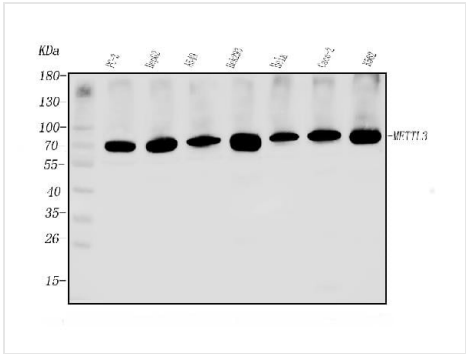
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for METTL3 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.005mg NaN3.
Applicable Applications for anti-METTL3 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.1-0.25ug/ml Human IHC-P: 2-5ug/ml Human ICC/IF: 5ug/ml Human FC/FACS/FCM: 1-3ug/1x106 cells Human Direct ELISA: 0.1-0.5ug/ml Human
Immunogen	A synthetic peptide corresponding to a sequence of human METTL3 (HNVQPNWITLGNQLDGIHLLDPDVVARFKQRYPDGIISKPKNL).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



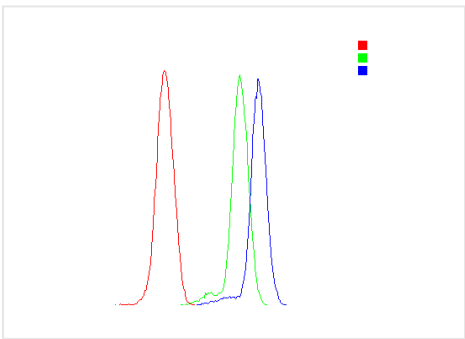
IHC (Immunohistochemistry)

Figure 7. IHC analysis of METTL3 using anti-METTL3 antibody (AAA19248).METTL3 was detected in paraffin-embedded section of human gastric cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-METTL3 Antibody (AAA19248) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



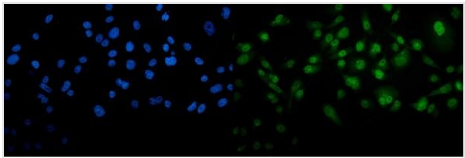
WB (Western Blot)

Figure 1. Western blot analysis of METTL3 using anti-METTL3 antibody (AAA19248).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human PC-3 whole cell lysatesLane 2: human HEPG2 whole cell lysatesLane 3: human A549 whole cell lysatesLane 4: human HEK293 whole cell lysatesLane 5: human HELA whole cell lysatesLane 6: human CACO-2 whole cell lysatesLane 7: human K562 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-METTL3 antigen affinity purified polyclonal antibody (Catalog # AAA19248) at 0. 25 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system). A specific band was detected for METTL3 at approximately 75KD. The expected band size for METTL3 is at 75KD.



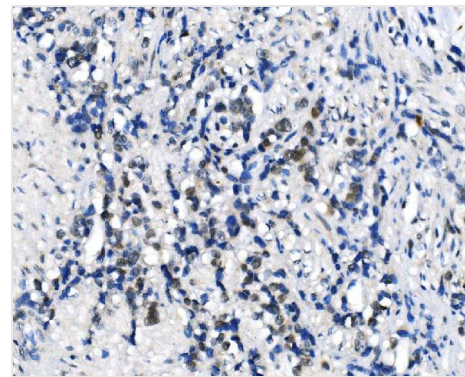
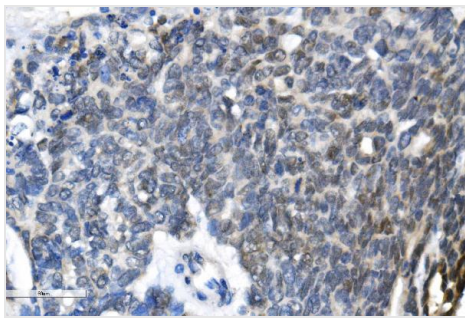
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of THP-1 cells using anti-METTL3 antibody (AAA19248).Overlay histogram showing THP-1 cells stained with AAA19248 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-METTL3 Antibody (AAA19248, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 5. IF analysis of METTL3 using anti- METTL3 antibody (AAA19248).METTL3 was detected in immunocytochemical section of PC-3 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti- METTL3 Antibody (AAA19248) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 4. IHC analysis of METTL3 using anti-METTL3 antibody (AAA19248). METTL3 was detected in paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-METTL3 Antibody (AAA19248) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).

IHC (Immunohistochemistry)

Figure 3. IHC analysis of METTL3 using anti-METTL3 antibody (AAA19248). METTL3 was detected in paraffin-embedded section of human gastric cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-METTL3 Antibody (AAA19248) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).

ADDITIONAL INFORMATION

Related Product Information for anti-METTL3 antibody	N6-adenosine-methyltransferase 70 kDa subunit (METTL3) is an enzyme that in humans is encoded by the METTL3 gene. It is mapped to 14q11. 2. This gene encodes the 70 kDa subunit of MT-A which is part of N6-adenosine-methyltransferase. This enzyme is involved in the posttranscriptional methylation of internal adenosine residues in eukaryotic mRNAs, forming N6-methyladenosine.
References	1. Alarcon, C. R., Lee, H., Goodarzi, H., Halberg, N., Tavazoie, S. F. N(6)-methyladenosine marks primary microRNAs for processing. <i>Nature</i> 519: 482-485, 2015. 2. Barbieri, I., Tzelepis, K., Pandolfini, L., Shi, J., Millan-Zambrano, G., Robson, S. C., Aspris, D., Migliori, V., Bannister, A. J., Han, N., De Braekeleer, E., Ponstingl, H., Hendrick, A., Vakoc, C. R., Vassiliou, G. S., Kouzarides, T. Promoter-bound METTL3 maintains myeloid leukaemia by m(6)A-dependent translation control. <i>Nature</i> 552: 126-131, 2017. 3. Bujnicki, J. M., Feder, M., Radlinska, M., Blumenthal, R. M. Structure prediction and phylogenetic analysis of a functionally diverse family of proteins homologous to the MT-A70 subunit of the human mRNA:m6A methyltransferase. <i>J. Molec. Evol.</i> 55: 431-444, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	21361827
NCBI GeneID	56339
NCBI Accession #	NP_062826
NCBI GenBank Nucleotide #	NM_019852
UniProt Accession #	Q86U44; O14736; Q86V05; Q9HB32
Molecular Weight	25,479 Da
NCBI Official Full Name	N6-adenosine-methyltransferase 70 kDa subunit
NCBI Official Synonym Full Names	methyltransferase like 3
NCBI Official Symbol	METTL3
NCBI Official Synonym Symbols	M6A; IME4; Spo8; MT-A70
NCBI Protein Information	N6-adenosine-methyltransferase 70 kDa subunit; adoMet-binding subunit of the human mRNA (N6-adenosine)-methyltransferase; mRNA (2'-O-methyladenosine-N(6)-)-methyltransferase; mRNA m(6)A methyltransferase; methyltransferase-like protein 3

UniProt Protein Name	N6-adenosine-methyltransferase 70 kDa subunit
UniProt Gene Name	METTL3
UniProt Synonym Gene Names	MTA70; MT-A70
UniProt Entry Name	MTA70_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/mettl3-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-direct-elisa-elisa/19248>