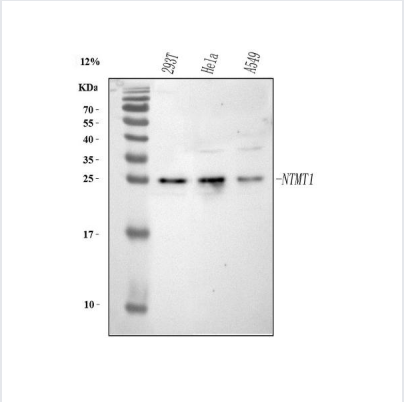
METTL11A/NTMT1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

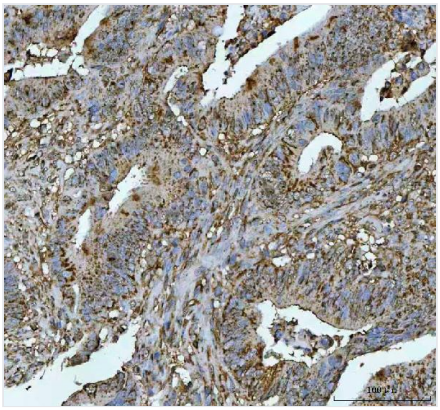
Product Name	METTL11A/NTMT1, Polyclonal Antibody
Full Product Name	Anti-METTL11A/NTMT1 Antibody Picoband
Product Gene Name	anti-METTL11A/NTMT1 antibody
Product Synonym Names	Protein NDRG3; Protein NDRG3; N-myc downstream-regulated gene 3 protein; NDRG3
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	Ubiquitous.Highly expressed in brain.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.
Molecular Weight	15,896 Da
OMIM	613560
3D Structure	ModBase 3D Structure for Q9BV86
Immunogen	E coli-derived human METTL11A/NTMT1 recombinant protein (Position: K21-R223).
Subcellular Localization	Membrane, Single-pass type I membrane protein
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins
Protein Function	Promotes the growth of epithelial cells. May stimulate the phosphorylation of EGFR and mitogen-activated protein kinases.
Product Categories/Family for anti-METTL11A/NTMT1 antibody	Primary Antibodies; Cancer; Cell Biology; Cell Cycle; Cell Differentiation; Tumor Biomarkers
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-METTL11A/NTMT1 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FC/FACS), ELISA (EIA)
Application Notes for anti-METTL11A/NTMT1 antibody	WB: 0.25-0.5ug/ml, Human IHC: 2-5ug/ml, Human ICC/IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml
Related Product Information for anti-METTL11A/NTMT1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product References and Citations for anti-METTL11A/NTMT1 antibody	1. Gross, M. B. Personal Communication. Baltimore, Md. 7/17/2014.2. Schaner Tooley, C. E., Petkowski, J. J., Muratore-Schroeder, T. L., Balsbaugh, J. L., Shabanowitz, J., Sabat, M., Minor, W., Hunt, D. F., Macara, I. G. NRMT is an alpha-N-methyltransferase that methylates RCC1 and retinoblastoma protein. Nature 466: 1125-1128, 2010.
Other Notes	Small volumes of anti-METTL11A/NTMT1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for METTL11A/NTMT1 purchase	MBS1759079 is an antibody targeting METTL11A/NTMT1. Also known as Anti-METTL11A/NTMT1 Antibody Picoband. Reactive in Human. Host: Rabbit.



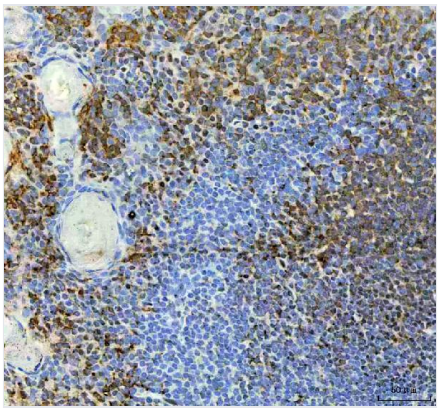
Western Blot (WB) of anti-METTL11A/NTMT1 antibody

Figure 1. Western blot analysis of METTL11A/NTMT1 using anti-METTL11A/NTMT1 antibody (MBS1759079).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 30 ug of sample under reducing conditions.Lane 1: human 293T whole cell lysates,Lane 2: human Hela whole cell lysates,Lane 3: human A549 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-METTL11A/NTMT1 antigen affinity purified polyclonal antibody (#MBS1759079) at 0.5ug/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 (#MBS176460) with Tanon 5200 system. A specific band was detected for METTL11A/NTMT1 at approximately 25 kDa. The expected band size for METTL11A/NTMT1 is at 25 kDa.

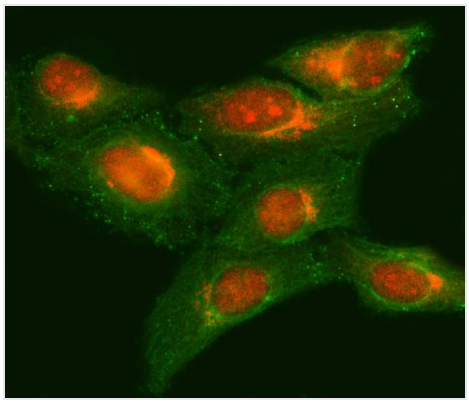


Immunohistochemistry (IHC) of anti-METTL11A/NTMT1 antibody

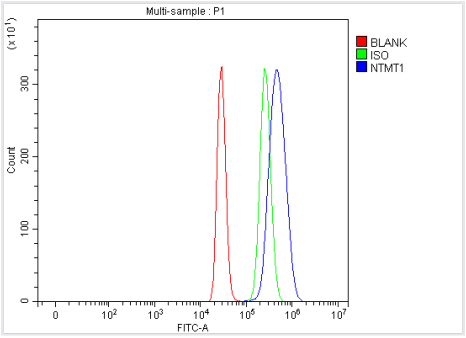
Figure 2. IHC analysis of METTL11A/NTMT1 using anti-METTL11A/NTMT1 antibody (MBS1759079).METTL11A/NTMT1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-METTL11A/NTMT1 Antibody (MBS1759079) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-METTL11A/NTMT1 antibody
Figure 3. IHC analysis of METTL11A/NTMT1 using anti-METTL11A/NTMT1 antibody (MBS1759079).METTL11A/NTMT1 was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-METTL11A/NTMT1 Antibody (MBS1759079) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.



Immunofluorescence (IF) of anti-METTL11A/NTMT1 antibody
Figure 4. IF analysis of METTL11A/NTMT1 using anti-METTL11A/NTMT1 antibody (MBS1759079) and anti-Beta Tubulin antibody (M01857-3).METTL11A/NTMT1 was detected in immunocytochemical section of HELA cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (#MBS176582) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-METTL11A/NTMT1 Antibody (MBS1759079) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and DyLight488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry (FC/FACS) of anti-METTL11A/NTMT1 antibody
Figure 5. Flow Cytometry analysis of HepG2 cells using anti-METTL11A/NTMT1 antibody (MBS1759079).Overlay histogram showing HepG2 cells stained with MBS1759079 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-METTL11A/NTMT1 Antibody (MBS1759079, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (MBS177405, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for METTL11A/NTMT1. It may not necessarily be applicable to this product.

NCBI GI #	557948057
NCBI GeneID	28989
NCBI Accession #	NP_001273725.1
UniProt Primary Accession #	Q9BV86
UniProt Secondary Accession #	Q5SZB9; Q9UI28; A8K4J2; A8K8G7
UniProt Related Accession #	Q9BV86
GenBank Nucleotide #	NM_001286796.1
NCBI Official Full Name	N-terminal Xaa-Pro-Lys N-methyltransferase 1 isoform a

NCBI Official Synonym Full Names	N-terminal Xaa-Pro-Lys N-methyltransferase 1
NCBI Official Symbol	NTMT1
NCBI Official Synonym Symbols	NRMT; NTM1A; AD-003; HOMT1A; C9orf32; METTL11A
UniProt Protein Name	N-terminal Xaa-Pro-Lys N-methyltransferase 1
UniProt Synonym Protein Names	Alpha N-terminal protein methyltransferase 1A; Methyltransferase-like protein 11A; N-terminal RCC1 methyltransferase; X-Pro-Lys N-terminal protein methyltransferase 1A; NTM1A
UniProt Gene Name	NTMT1
UniProt Synonym Gene Names	C9orf32; METTL11A; NRMT; NRMT1; NTM1A
UniProt Entry Name	NTM1A_HUMAN
NCBI Protein Information	N-terminal Xaa-Pro-Lys N-methyltransferase 1
UniProt Comments for METTL11A/NTMT1	METTL11A: Alpha-N-methyltransferase that methylates the N-terminus of target proteins containing the N-terminal motif [Ala/Pro/Ser]- Pro-Lys when the initiator Met is cleaved. Specifically catalyzes mono-, di- or tri-methylation of exposed alpha-amino group of Ala or Ser residue in the [Ala/Ser]-Pro-Lys motif and mono- or di- methylation of Pro in the Pro-Pro-Lys motif. Responsible for the N-terminal methylation of KLHL31, MYL2, MYL3, RB1, RCC1, RPL23A and SET. Required during mitosis for normal bipolar spindle formation and chromosome segregation via its action on RCC1. Belongs to the methyltransferase superfamily. NTM1 family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: EC 2.1.1.244; Methyltransferase; Methyltransferase, protein N-term Chromosomal Location of Human Ortholog: 9q34.11 Cellular Component: cytoplasm; nucleoplasm; nucleus Molecular Function: histone methyltransferase activity; protein methyltransferase activity Biological Process: chromosome segregation; histone methylation; N-terminal peptidyl-alanine methylation; N-terminal peptidyl-glycine methylation; N-terminal peptidyl-proline di-methylation; spindle organization and biogenesis
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/mettl11a-ntmt1/1759079