

## Product datasheet

# Anti-PRMT5 antibody - N-terminal ab227457

5 Images

### Overview

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<b>Product name</b>	Anti-PRMT5 antibody - N-terminal
<b>Description</b>	Rabbit polyclonal to PRMT5 - N-terminal
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat, Cow, Pig, Chimpanzee, Rhesus monkey 
<b>Immunogen</b>	Recombinant fragment within Human PRMT5 (N terminal). The exact sequence is proprietary. Database link: <a href="#">O14744</a>
<b>Positive control</b>	IHC-P: Mouse intestine and kidney tissues; MCF7 xenograft tissue. ICC/IF: A431 cells. WB: Raji whole cell lysate.
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&amp;As.</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

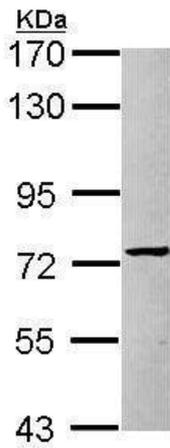
Our [Abpromise guarantee](#) covers the use of **ab227457** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100 - 1/1000.
IHC-P		1/100 - 1/1000.
WB		1/500 - 1/3000. Predicted molecular weight: 73 kDa.

## Target

<b>Function</b>	Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and symmetrical dimethylarginine (sDMA), with a preference for the formation of MMA. Specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3); such methylation being required for the assembly and biogenesis of snRNP core particles. Methylates SUPT5H. Mono- and dimethylates arginine residues of myelin basic protein (MBP) in vitro. Plays a role in the assembly of snRNP core particles. May play a role in cytokine-activated transduction pathways. Negatively regulates cyclin E1 promoter activity and cellular proliferation. May regulate the SUPT5H transcriptional elongation properties. May be part of a pathway that is connected to a chloride current, possibly through cytoskeletal rearrangement. Methylates histone H2A and H4 'Arg-3' during germ cell development. Methylates histone H3 'Arg-8', which may repress transcription. Methylates the Piwi proteins (PIWIL1, PIWIL2 and PIWIL4), methylation of Piwi proteins being required for the interaction with Tudor domain-containing proteins and subsequent localization to the meiotic nuage. Methylates RPS10.
<b>Tissue specificity</b>	Ubiquitous.
<b>Sequence similarities</b>	Belongs to the protein arginine N-methyltransferase family.
<b>Post-translational modifications</b>	Disulfide bonds and non-covalent association mediate homooligomers formation.
<b>Cellular localization</b>	Cytoplasm. Nucleus.

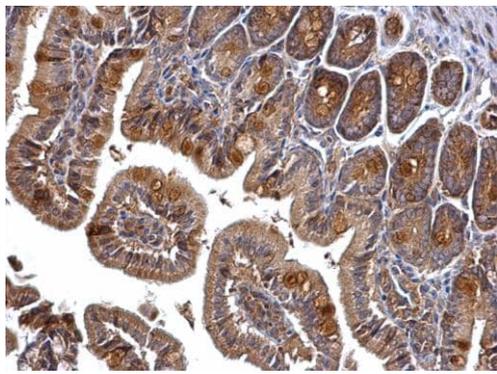


Western blot - Anti-PRMT5 antibody - N-terminal (ab227457)

Anti-PRMT5 antibody - N-terminal (ab227457) at 1/1000 dilution + Raji whole cell lysate at 30 µg

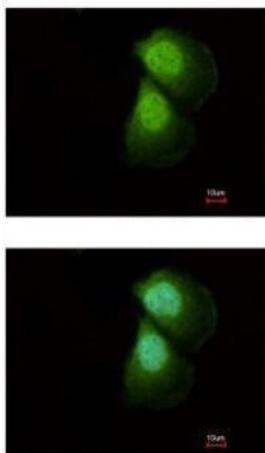
**Predicted band size:** 73 kDa

7.5% SDS-PAGE gel.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRMT5 antibody - N-terminal (ab227457)

Paraffin-embedded mouse intestine tissue stained for PRMT5 using ab227457 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-PRMT5 antibody - N-terminal (ab227457)

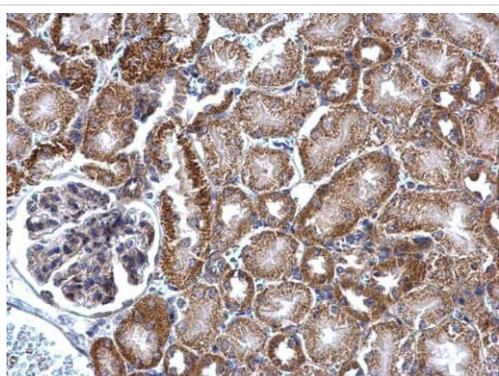
A431 (human epithelial cell line from cervix adenocarcinoma) cells stained for PRMT5 (green) using ab227457 at 1/500 dilution in ICC/IF. Cells were fixed in paraformaldehyde.

Lower panel costained with Hoechst 33342.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRMT5 antibody - N-terminal (ab227457)

Paraffin-embedded MCF7 (human) xenograft tissue stained for PRMT5 using ab227457 at 1/500 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRMT5 antibody - N-terminal (ab227457)

Paraffin-embedded mouse kidney tissue stained for PRMT5 using ab227457 at 1/500 dilution in immunohistochemical analysis.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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