# abcam

### Product datasheet

## Anti-PRMT7 antibody [EPR13495] ab181214

Recombinant RabMAb

#### 4 References 3 Images

#### Overview

Product name	Anti-PRMT7 antibody [EPR13495]		
Description	Rabbit monoclonal [EPR13495] to PRMT7		
Host species	Rabbit		
Tested applications	Suitable for: WB, ICC/IF		
Species reactivity	Reacts with: Human		
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.		
Positive control	HepG2, HeLa, 293 and MCF7 cell lysates.		
General notes	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> </ul>		
Properties			
Former .			

Form	Liquid
Storage instructions	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.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR13495
lsotype	lgG

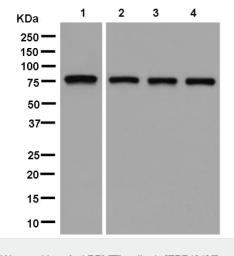
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab181214 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 78 kDa (predicted molecular weight: 78 kDa).
ICC/IF		1/100 - 1/250.

Target	
Function	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. Specifically mediates the symmetric dimethylation of histone H4 'Arg-3' to form H4R3me2s. Plays a role in gene imprinting by being recruited by CTCFL at the H19 imprinted control region (ICR) and methylating histone H4 to form H4R3me2s, possibly leading to recruit DNA methyltransferases at these sites. May also play a role in embryonic stem cell (ESC) pluripotency. Also able to mediate the arginine methylation of histone H2A and myelin basic protein (MBP) in vitro; the relevance of such results is however unclear in vivo.
Involvement in disease	Defects in PRMT7 are associated with mild intellectual disabilityy, obesity and symmetrical shortening of the digits and posterior metacarpals and metatarsals. The phenotype is a phenocopy of pseudohypoparathyroidism (PHP).
Sequence similarities	Belongs to the class I-like SAM-binding methyltransferase superfamily. Protein arginine N- methyltransferase family. PRMT7 subfamily. Contains 2 SAM-dependent MTase PRMT-type domains.
Cellular localization	Cytoplasm, cytosol. Nucleus.

Images



Western blot - Anti-PRMT7 antibody [EPR13495] (ab181214) All lanes : Anti-PRMT7 antibody [EPR13495] (ab181214) at 1/2000 dilution

Lane 1 : HepG2 cell lysate Lane 2 : HeLa cell lysate Lane 3 : 293 cell lysate Lane 4 : MCF7 cell lysate

Lysates/proteins at 20 µg per lane.

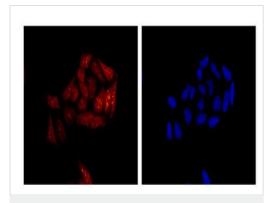
#### Secondary

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Immunofluorescent analysis of HeLa cells (-20) acetone-

fixed) labeling PRMT7 with ab181214 at 1/250 dilution (red). Goat anti rabbit lgG (Alexa Fluor® 555) was used as a secondary antibody, at a dilution of 1/200. Counter stain: Dapi (blue).

Predicted band size: 78 kDa



Immunocytochemistry/ Immunofluorescence - Anti-PRMT7 antibody [EPR13495] (ab181214)



Anti-PRMT7 antibody [EPR13495] (ab181214)

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