# abcam

## Product datasheet

## Anti-PRMT6 antibody ab72205

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Overview

Product name Anti-PRMT6 antibody

**Description** Rabbit polyclonal to PRMT6

Host species Rabbit

Tested applications

Suitable for: IHC-P, WB

Species reactivity

Reacts with: Human

Predicted to work with: Horse, Cow, Dog, Chimpanzee, Rhesus monkey, Gorilla, Chinese

hamster, Orangutan, Elephant 🔼

Immunogen Synthetic peptide corresponding to Human PRMT6 (C terminal). A region between residue 325

and the C-terminus (residue 375) of PRMT6 (AAK85733.1).

Database link: 55170

**Positive control** Whole cell lysate from 293T cells.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7

Preservative: 0.09% Sodium azide

Constituents: 1.815% Tris, 1.764% Sodium citrate, 0.021% PBS

**Purity** Immunogen affinity purified

**Purification notes**Antibody was affinity purified using an epitope specific to PRMT6 immobilized on solid support.

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

#### The Abpromise quarantee

Our Abpromise guarantee covers the use of ab72205 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
IHC-P		1/2000 - 1/10000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	★★☆☆☆ (1)	1/2000 - 1/10000. Predicted molecular weight: 42 kDa.

#### **Target**

#### **Function**

Arginine methyltransferase that can catalyze the formation of both omega-N monomethylarginine (MMA) and asymmetrical dimethylarginine (aDMA), with a strong preference for the formation of aDMA. Preferentially methylates arginyl residues present in a glycine and arginine-rich domain and displays preference for monomethylated substrates. Specifically mediates the asymmetric dimethylation of histone H3 'Arq-2' to form H3R2me2a. H3R2me2a represents a specific tag for epigenetic transcriptional repression and is mutually exclusive with methylation on histone H3 'Lys-4' (H3K4me2 and H3K4me3). Acts as a transcriptional repressor of various genes such as HOXA2, THBS1 and TP53. Repression of TP53 blocks cellular senescence (By similarity). Also methylates histone H2A and H4 'Arg-3' (H2AR3me and H4R3me, respectively). Acts as a regulator of DNA base excision during DNA repair by mediating the methylation of DNA polymerase beta (POLB), leading to the stimulation of its polymerase activity by enhancing DNA binding and processivity. Methylates HMGA1. Regulates alternative splicing events. Acts as a transcriptional coactivator of a number of steroid hormone receptors including ESR1, ESR2, PGR and NR3C1. Promotes fasting-induced transcriptional activation of the gluconeogenic program through methylation of the CRTC2 transcription coactivator. May play a role in innate immunity against HIV-1 in case of infection by methylating and impairing the function of various HIV-1 proteins such as Tat, Rev and Nucleocapsid protein p7 (NC).

## Tissue specificity

Highly expressed in kidney and testis.

### Sequence similarities

Belongs to the class Hike SAM-binding methyltransferase superfamily. Protein arginine N-

 $methyl transferase\ family.\ PRMT6\ subfamily.$ 

## Post-translational

modifications

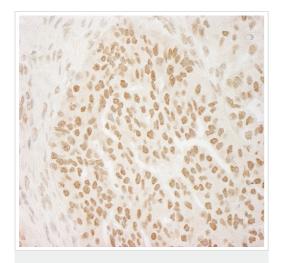
Automethylation enhances its stability and antiretroviral activity.

Contains 1 SAM-dependent MTase PRMT-type domain.

#### **Cellular localization**

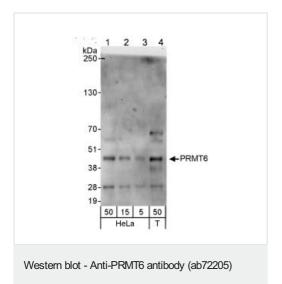
Nucleus.

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling PRMT6 with ab72205 at 1/5000 (0.2  $\mu$ g/ml). Detection: DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PRMT6 antibody (ab72205)



All lanes: Anti-PRMT6 antibody (ab72205) at 0.04 µg/ml

Lane 1 : HeLa cell lysate at 50 μg Lane 2 : HeLa cell lysate at 15 μg Lane 3 : HeLa cell lysate at 5 μg Lane 4 : 293T cell lysate at 50 μg

Predicted band size: 42 kDa

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

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