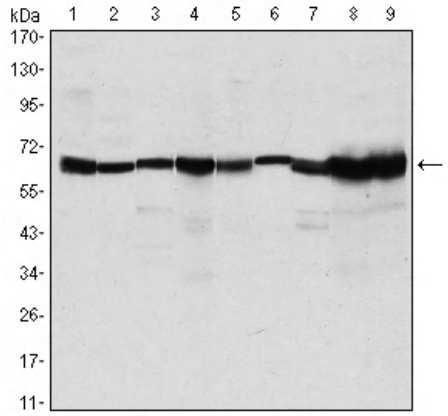
PRMT4 Monoclonal Antibody

Catalog No	YP-Ab-01014
Isotype	IgG
Reactivity	Human;Rat;Monkey
Applications	WB;IHC;IF;FCM;ELISA
Gene Name	CARM1
Protein Name	Histone-arginine methyltransferase CARM1
Immunogen	Purified recombinant fragment of human PRMT4 expressed in E. Coli.
Specificity	PRMT4 Monoclonal Antibody detects endogenous levels of PRMT4 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CARM1; PRMT4; Histone-arginine methyltransferase CARM1; Coactivator-associated arginine methyltransferase 1; Protein arginine N-methyltransferase 4
Observed Band	
Cell Pathway	Nucleus . Cytoplasm . Mainly nuclear during the G1, S and G2 phases of the cell cycle (PubMed:19843527). Cytoplasmic during mitosis, after breakup of the nuclear membrane (PubMed:19843527). .
Tissue Specificity	Overexpressed in prostate adenocarcinomas and high-grade prostatic intraepithelial neoplasia.
Function	catalytic activity:S-adenosyl-L-methionine + histone-arginine = S-adenosyl-L-homocysteine + histone-N(omega)-methyl-arginine.,function:Methylates (mono- and asymmetric dimethylation) the guanidino nitrogens of arginyl residues in several proteins involved in DNA packaging, transcription regulation, and mRNA stability. Recruited to promoters upon gene activation together with histone acetyltransferases from EP300/P300 and p160 families, methylates histone H3 at 'Arg-17' and activates transcription via chromatin remodeling. During nuclear hormone receptor activation and TCF7L2/TCF4 activation, acts synergically with EP300/P300 and either one of the p160 histone acetyltransferases NCOA1/SRC1, NCOA2/GRIP1 and NCOA3/ACTR or CTNNB1/beta-catenin to activate transcription. During myogenic transcriptional activation, acts together

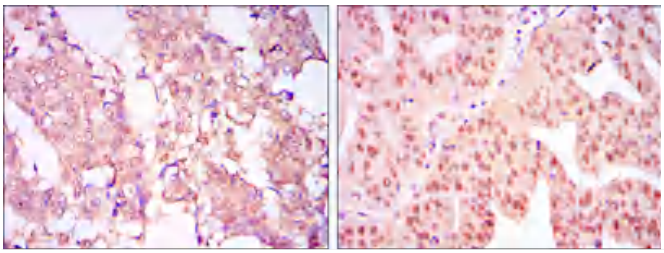
with NCOA3/ACTR as a coactivator for MEF2C. During monocyte inflam

Background	This gene belongs to the protein arginine methyltransferase (PRMT) family. The encoded enzyme catalyzes the methylation of guanidino nitrogens of arginyl residues of proteins. The enzyme acts specifically on histones and other chromatin-associated proteins and is involved in regulation of gene expression. The enzyme may act in association with other proteins or within multi-protein complexes and may play a role in cell type-specific functions and cell lineage specification. A related pseudogene is located on chromosome 9. [provided by RefSeq, Aug 2013],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

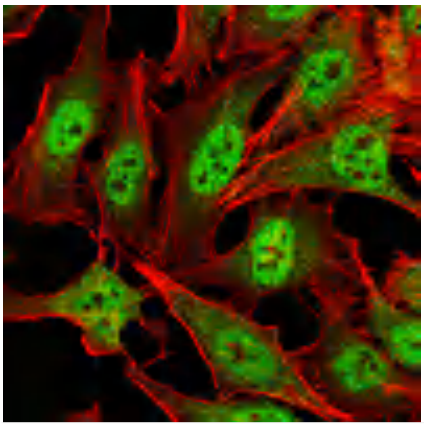
Products Images



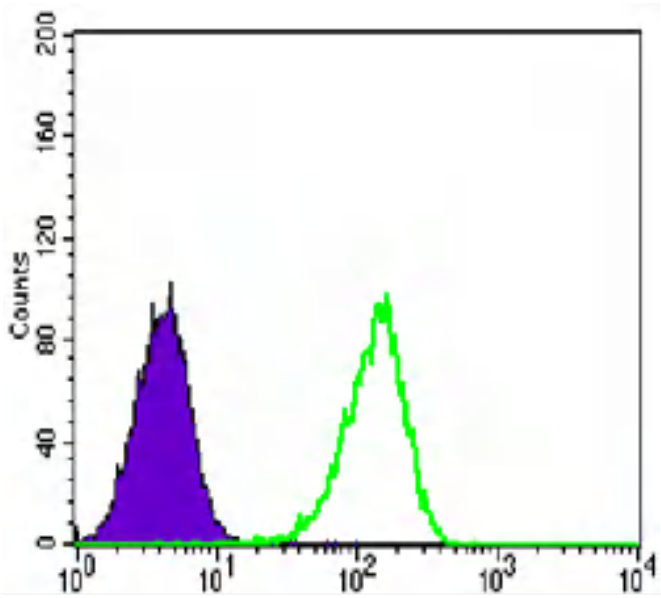
Western Blot analysis using PRMT4 Monoclonal Antibody against MCF-7 (1), HeLa (2), NIH/3T3 (3), HL-60 (4), LNcap (5), Jurkat (6), PC-3 (7), Cos7 (8), and PC-12 (9) cell lysate.



Immunohistochemistry analysis of paraffin-embedded breast cancer tissues (left) and ovarian cancer tissues (right) with DAB staining using PRMT4 Monoclonal Antibody.



Immunofluorescence analysis of Hela cells using PRMT4 Monoclonal Antibody (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Lovo cells using PRMT4 Monoclonal Antibody (green) and negative control (purple).