CELL APPLICATIONS, INC.

PRMT1 Antibody

Cat. No. CG1483

Applications:	**WB, IP**
Detected MW:	**42 kDa**
Species & Reactivity:	**Human, Hamster, Rat, Mouse, Monkey**
Isotype:	**Rabbit IgG**

BACKGROUND

The family of Protein Arginine N-Methyltransferases (PRMTs) catalyze the sequential transfer of a methyl group from AdoMet to the side chain nitrogens of arginine residues within proteins to form methylated arginine derivatives and S-adenosyl-L-homocysteine.[1] There are eleven different PRMT genes (PRMT1-11) whose biological function remains under explored. With regard to the dimethylation product, PRMTs are distinguished into type I enzymes, which catalyze the asymmetric NG,NG-dimethyl-arginine, and the type II subfamily, which consists of PRMT5, PRMT7, and PRMT9 and generates symmetric NG,NG'-dimethylation. PRMT2 was isolated based on its sequence similarity with PRMT1. So far no methyltransferase activity has been revealed for PRMT2.[2] PRMTs regulate various cellular processes such as DNA repair and transcription, RNA processing, signal transduction, and nucleo-cytoplasmic localization. Like histone lysine methylation, methylation of histone arginine residues can either induce or inhibit transcription depending on the residue being modified and the type of methylation being introduced.[3]

References:

1. Litt M et al.: Biosci Rep. 29:131-41, 2009.
2. Meyer R et al.: J Steroid Biochem Mol Biol. 107:1-14, 2007.
3. Lee YH. & Stallcup MR: Mol Endocrinol. 23:425-33, 2009.

TECHNICAL INFORMATION

Source:
PRMT1 Antibody is a rabbit Antibody raised against a short peptide from human PRMT1 sequence.

Specificity and Sensitivity:
This antibody detects endogenous PRMT1 proteins without cross-reactivity with other family members.

Storage Buffer: Solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

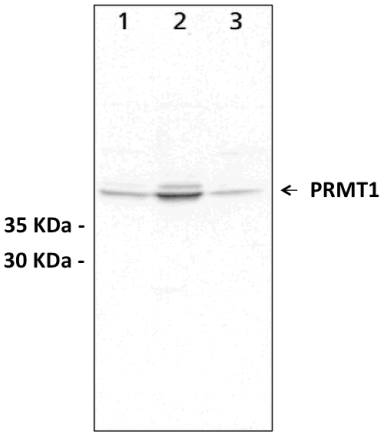
Storage:
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1-2 ug/mL
IP	2.5-5 ug
IHC	n.d
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Cell extracts were separated on SDS-PAGE and blotted with Anti-PRMT1 at 1 µg/mL and developed using Goat Anti-Rabbit IgG-Peroxidase and a chemiluminescent substrate. (Left Lane) MCF7 cells; (Middle Lane) Chinese ovary cells; (Right Lane) HEK 293-T cells.