



## Product Information

### Anti-PRMT6 (SE-15)

Developed in Rabbit  
Affinity isolated Antibody

Product Number **P 6495**

### Product Description

Anti PRMT6 (SE-15) is developed in rabbit using as immunogen a synthetic peptide corresponding to amino acids 2-16 of human PRMT6, conjugated to KLH via a C-terminal added cysteine. The antibody is affinity purified on the immunizing peptide immobilized on agarose.

Anti PRMT6 (SE-15) antibody reacts specifically with PRMT6. Applications include immunoblotting, immunofluorescence, and immunoprecipitation. Staining of the PRMT6 band in immunoblotting is specifically inhibited by the PRMT6 immunizing peptide.

Postranslational modifications of proteins play an important role in the regulation of protein function, stability and localization. Such modifications occur on different amino acids and include phosphorylation, glycosylation, acetylation or methylation.<sup>1</sup> Methylation can occur at lysine or arginine residues.<sup>2,3</sup> Arginine methylation is mediated by the Protein Arginine Methyl Transferase (PRMT) family of enzymes. These enzymes transfer the methyl group from S-adenosyl-L-methionine to the guanidino nitrogen atoms of an arginine residue. Arginine methylation was found to be an important modification in signal transduction, transcription, RNA transport and splicing.<sup>4,5</sup>

PRMTs are divided in two major types, type I (including PRMT1, 3, 4, and 6) and type II (PRMT5). Both types catalyze the formation of monomethylarginine, but differ in that type I catalyzes the formation of asymmetric dimethylarginine, whereas type II catalyzes the formation of symmetric dimethylarginine.<sup>6-8</sup> PRMT4 (also called CARM1) plays a central role in regulation of transcription by nuclear hormone receptors (NRs).<sup>3</sup> PRMT6 was found through a BLAST homology search for sequences that match known PRMT sequences.<sup>7</sup> From the PRMTs isolated to date, PRMT6 is most similar to PRMT2 in the catalytic core region, however, it does not contain an N-terminal Src homology 3 domain found in the PRMT2 sequence.<sup>7</sup>

Antibodies specific for PRMT6 are an important tool for studying the biology of PRMTs.

### Reagent

Anti-PRMT6 (SE-15) is supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% bovine serum albumin and 15 mM sodium azide.

Antibody Concentration: Approx. 0.9 mg/ml.

### Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

### Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing is not recommended. Storage in frost-free freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

### Product Profile

By immunoblotting, a working antibody concentration of 0.25-0.5 µg/ml is recommended using cell extracts of PRMT6 transfected 293T cells.

By indirect immunofluorescence, a working antibody concentration of 3-4 µg/ml is recommended using paraformaldehyde fixed HeLa cells.

By immunoprecipitation, 2.5-5 µg of the antibody immunoprecipitates PRMT6 protein from extracts of PRMT6 transfected 293T cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

## References

1. Strahl, B.D., and Allis, C.D., *Nature*, **403**, 41-45 (2000).
2. Rea, S., et al., *Nature*, **406**, 593-599 (2000).
3. Chen, D., et al., *Science*, **284**, 2174-2177 (1999).
4. Davie, J.K., and Dent, Y.R., *Curr. Biol.*, **12**, R59-R61 (2002).
5. Li, H., et al., *J. Biol. Chem.*, **277**, 44623-44630 (2002).
6. Rho, J., et al., *J. Biol. Chem.*, **276**, 11393-11401 (2001).
7. Frankel, A., et al., *J. Biol. Chem.*, **277**, 3537-3543 (2002).
8. Frankel, A., et al., *J. Biol. Chem.*, **275**, 32974-32982 (2000).

KAA/NV 11/03

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