

## type II protein arginine methyltransferase

Cat. No. EXWM-1928

Lot. No. (See product label)

### Introduction

#### Description

The enzyme catalyses the methylation of one of the terminal guanidino nitrogen atoms in arginine residues within proteins, forming monomethylarginine, followed by the methylation of the second terminal nitrogen atom to form a symmetrical dimethylarginine. The mammalian enzyme is active in both the nucleus and the cytoplasm, and plays a role in the assembly of snRNP core particles by methylating certain small nuclear ribonucleoproteins. cf. EC 2.1.1.319, type I protein arginine methyltransferase, EC 2.1.1.321, type III protein arginine methyltransferase, and EC 2.1.1.322, type IV protein arginine methyltransferase.

#### Synonyms

PRMT5 (gene name); PRMT9 (gene name)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 2.1.1.320

#### Reaction

$2 \text{ S-adenosyl-L-methionine} + [\text{protein}]\text{-L-arginine} = 2 \text{ S-adenosyl-L-homocysteine} + [\text{protein}]\text{-N}\omega, \text{N}\omega'\text{-dimethyl-L-arginine}$  (overall reaction);  
(1a)  $\text{S-adenosyl-L-methionine} + [\text{protein}]\text{-L-arginine} = \text{S-adenosyl-L-homocysteine} + [\text{protein}]\text{-N}\omega\text{-methyl-L-arginine}$ ;  
(1b)  $\text{S-adenosyl-L-methionine} + [\text{protein}]\text{-N}\omega\text{-methyl-L-arginine} = \text{S-adenosyl-L-homocysteine} + [\text{protein}]\text{-N}\omega, \text{N}\omega'\text{-dimethyl-L-arginine}$

#### Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

#### Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.