Creative Enzymes®

type I protein arginine methyltransferase

Cat. No. EXWM-1927

Lot. No. (See product label)

Introduction

Description	This eukaryotic enzyme catalyses the sequential dimethylation of one of the terminal guanidino nitrogen atoms in arginine residues, resulting in formation of asymmetric dimethylarginine residues. Some forms (e.g. PRMT1) have a very wide substrate specificity, while others (e.g. PRMT4 and PRMT6) are rather specific. The enzyme has a preference for methylating arginine residues that are flanked by one or more glycine residues. PRMT1 is responsible for the bulk (about 85%) of total protein arginine methylation activity in mammalian cells. cf. EC 2.1.1.320, type II 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	PRMT1 (gene name); PRMT2 (gene name); PRMT3 (gene name); PRMT4 (gene name); PRMT6 (gene name); PRMT8 (gene name); RMT1 (gene name); CARM1 (gene name)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.1.1.319
Reaction	2 S-adenosyl-L-methionine + [protein]-L-arginine = 2 S-adenosyl-L-homocysteine + [protein]-Nω,Nω-dimethyl-L-arginine (overall reaction); (1a) S-adenosyl-L-methionine + [protein]-L-arginine = S-adenosyl-L-homocysteine + [protein]-Nω-methyl-L-arginine; (1b) S-adenosyl-L-methionine + [protein]-Nω-methyl-L-arginine = S-adenosyl-L-homocysteine + [protein]-Nω,Nω-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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.