

Supplementary Table 1. Properties of *E. invadens* PRMT genes and proteins

Accession number	Gene length (bp)	Introns	mRNA length (bp)	Protein length (aa)	Molecular weight (kDa)	pI
EIN_172090	800 ^a	NA ^b	NA	NA	NA	NA
EIN_223690	1978	2	1827	608	69.8	5.57
EIN_398100	1068	1	999	332	38.2	5.10
EIN_497480	966	No	966	321	37	5.22

^a Incomplete gene, missing the 5'-end

^b Not Applicable

Table S2. Comparison between EiPRMTs and EhPRMTs

	EhPRMT1a	EhPRMT1b	EhPRMT1c	EhPRMTA	EhPRMT5
EIN_497480	57.55^a	42.95	41.01	29.64	17.18
EIN_398100	41.64	42.51	83.73^a	24.53	19.40
EIN_172090	27.06	28.35	27.76	58.17^a	15.77
EIN_223690	19.10	22.97	18.73	15.60	46.32^a

^a highest identity