

Table 1: Detectable histone H3 methylation states for the *in vitro* HMT assays with EHMT1/GLP and EHMT2/G9a

EHMT1/GLP			
	Mono-methyl	Di-methyl	Tri-methyl
Lysine 4	X	X	X
Lysine 9	✓	✓	✓
Lysine 14	X	X	X
Lysine 18	✓	✓	✓
Lysine 23	✓	✓	✓
Lysine 27	✓	✓	✓
Lysine 36	X	X	X

EHMT2/G9a			
	Mono-methyl	Di-methyl	Tri-methyl
Lysine 4	X	X	X
Lysine 9	✓	✓	✓
Lysine 14	X	X	X
Lysine 18	✓	✓	✓
Lysine 23	✓	✓	X
Lysine 27	✓	✓	✓

Table 1 shows the individual methylation states, detected by western blot and mass spec., for the *in vitro* HMT reactions with EHMT1/GLP and EHMT2/G9a.