

a

Dot blot outline for H3K9 and H3K36 methyl antibodies

H3K18ac	H3K23ac	H3K27me1	H3K27me2	H3K27me3	H3K27meun
H3K4/K9/14un	H3K9ac		H3K9me1	H3K9me2	H3K9me3
H3K9me3S10ph					

Dot blot outline for H3K27 methyl antibodies

H3K9me1	H3K9me2
H3K9me3	H3K9unme
H3K27me1	H3K27me2
H3K27me3	H3K27me3S28ph
H3K27unme	

Dot blot outline for H3K4 methyl antibodies

H3K4me1
H3K4me2
H3K4me3
H3K4unme

Dot blot outline for H3K79 methyl antibodies

H3K79me1
H3K79me2
H3K79me3
H3K79unme

b

Dot blot outline

1. H3K4me1	9. H3K9me3S10ph	17. H3k79me2	25. H3K27un
2. H3K4me2	10. H3K27me1	18. H3K79me3	26. H3K36un
3. H3K4me3	11. H3K27me2	19. H3K27me3S28ph	27. H3K79un
4. H3K9ac	12. H3K27me3	20. H3R17me25as	28. H3K20un
5. H3K9me1	13. H3K36me1	21. H3S10ph	
6. H3K9me2	14. H3K36me2	22. H4K20me1	
7. H3K9me3	15. H3K36me3	23. H4K20me3	
8. H3K9acS10ph	16. H3K79me1	24. H3K4/9/14un	

Supplementary Figure 1 Description of peptide arrays. (a) Peptide arrays used by group 2. Each membrane was spotted with 100, 33, 10, and 3.3 pmol of each peptide. (b) Peptide array used by group 3. Each membrane was spotted with 100, 25 and 10 pmol of each peptide. The peptide array used by group 1 is shown in **Fig. 2a**.