**S9 Fig**

**A.**

Heatmap showing the correlation of different histone marks.

- Histone modifications: H3K23ac, H3K56ac, H3K4ac, H3K9ac, H3K14ac, H3K18ac, H2A.K5ac, H3K27ac, H4K12ac, H4K5ac, H4K16ac, H3K4me1, H4K20me1, H3K36me2, H3K36me1, H3K79me1, H3K4me2, H3S10ph, H4K16ac, H3K4me3, H3K9ac, H3K36me3.

**B.**

Box plots showing the histone mark correlation at +1 nucleotides for all histone marks and metabolome enriched marks.

- Significance: p < 4.1e-04

**Modification set**

- All Histone Marks
- Metabolome Enriched Marks