

**S19 Fig. SIP patterns at different resolution (GM12878 HiChIP data) (A)** The distribution of the number of significant interactions (log10 scale) for SIPs and non-SIPs, at 5kb resolution; **(B)** The distribution of the number of significant interactions (log10 scale) for SIPs and non-SIPs, at 10kb resolution; **(C)** The distribution of the median SIP score (-log10 MAPS q-value) of significant interactions for SIPs and non-SIPs, at 5kb resolution; **(D)** The distribution of the median SIP score (-log10 MAPS q-value) of significant interactions for SIPs and non-SIPs, at 10kb resolution.