

**Table S1. Summary of OCEAN-C, FAIRE-seq, Hi-C and RNA-seq data.****A. Summary of OCEAN-C Data**

Cell line	Replicate	Sequencing reads	Mapped and dup removed reads	Cis interact read pairs	HOCl
<b>U266</b>	Replicate 1	368411842	266032488	53841187	12003
<b>RPMI8226</b>	Replicate 1	673360694	394655862	103416714	10686
<b>GM12878</b>	Replicate 1	407593898	291014471	64334977	9505
<b>GM12878</b>	Replicate 2	414533876	290404915	73268567	9787
<b>GM12878</b>	Combined	822127774	581419386	137603544	12231

**B. Summary of FAIRE-seq Library Data**

Cell line	Replicate	Sequencing reads	Mapped and filtered reads	Open chromatin
<b>U266</b>	Replicate 1	235007648	35593971	69313
<b>RPMI8226</b>	Replicate 1	226477078	29727633	92882
<b>GM12878</b>	Replicate 1	200098720	63104334	48556

**C. Summary of Hi-C Library Data**

Cell line	Replicate	Sequencing reads	Mapped and dup removed reads	Cis interact read pairs
<b>U266</b>	Replicate 1	208522886	183274599	43383922
<b>RPMI8226</b>	Replicate 1	244454180	211240383	48657005
<b>GM12878</b>	Replicate 1	409620210	234606571	50428576

**D. Summary of RNA-seq Library Data**

Cell line	Replicate	Sequencing reads	Mapped and filtered reads
<b>U266</b>	Replicate 1	32184358	30581367
<b>U266</b>	Replicate 2	40382044	37450514
<b>U266</b>	Replicate 3	42281606	40679308
<b>U266</b>	Combined	114848008	108711189
<b>RPMI8226</b>	Replicate 1	34837134	32559191
<b>RPMI8226</b>	Replicate 2	40040036	37868327
<b>RPMI8226</b>	Replicate 3	37013790	35137569
<b>RPMI8226</b>	Combined	111890960	105565087