

Table S3. Raw data for Fig. 2B**Comparison of target binding of Ring1B in ES cells and expression changes in *Ring1B* constitutive KO ES cells**

Fold enrichment	No. of genes	No. of expressed genes	No. of derepressed genes	No. of repressed genes	Mean of expression changes (KO/cont)	Mean of expression changes (log ₁₀)	SD	P value
0.0-2.5	3872	1315	674	641	1.030	0.013	0.189	1.54E-02
2.5-5.0	5103	2744	1398	1346	1.029	0.012	0.187	5.90E-04
5.0-7.5	4699	2799	1449	1350	1.033	0.014	0.187	8.34E-05
7.5-10.0	2556	1515	782	733	1.037	0.016	0.198	1.91E-03
10.0-12.5	1303	743	397	346	1.070	0.029	0.197	5.67E-05
12.5-15.0	657	368	212	156	1.127	0.052	0.214	4.21E-06
15.0-17.5	357	198	118	80	1.183	0.073	0.260	1.14E-04
17.5-20.0	172	84	51	33	1.228	0.089	0.281	4.86E-03
20.0-22.5	108	51	36	15	1.596	0.203	0.351	1.56E-04
22.5-25.0	39	12	9	3	1.250	0.097	0.199	1.34E-01
25.0+	96	43	31	12	1.463	0.165	0.398	1.02E-02

Comparison of target binding of Ring1B in ES cells and expression changes in *Ring1AB*-dKO (day 4) ES cells

Fold enrichment	No. of genes	No. of expressed genes	No. of derepressed genes	No. of repressed genes	Mean of expression changes (KO/cont)	Mean of expression changes (log ₁₀)	SD	P value
0.0-2.5	3872	1292	611	681	1.004	0.002	0.240	7.90E-01
2.5-5.0	5103	2693	1306	1387	1.012	0.005	0.235	2.55E-01
5.0-7.5	4699	2749	1354	1395	1.040	0.017	0.250	4.18E-04
7.5-10.0	2556	1510	771	739	1.097	0.040	0.276	1.68E-08
10.0-12.5	1303	753	423	330	1.217	0.085	0.313	2.04E-13
12.5-15.0	657	369	204	165	1.240	0.093	0.334	1.49E-07
15.0-17.5	357	201	120	81	1.355	0.132	0.385	2.55E-06
17.5-20.0	172	86	54	32	1.403	0.147	0.373	4.67E-04
20.0-22.5	108	53	29	24	1.662	0.221	0.491	2.07E-03
22.5-25.0	39	13	9	4	2.035	0.309	0.414	2.40E-02
25.0+	96	41	30	11	2.148	0.332	0.484	9.38E-05