Correlation of rover insertions with Modencode tracks for S2 1.3 ORC2 -MCM2-7 -1.2 0.81 SPT16 Smc3 0.81 0.66 RPD3 -ACF1 0.6 0.58 dmTopo-II H4K20me1 -0.53 dMi-2 -0.51 0.5 dSFMBT -GAF -H3K79me3 -0.49MOF -

ISWI -WDS -0.41 LSD1 -0.4 0.35 H3K4me3 -Replication-Origin 0.35 0.35 MRG15 -H3K27ac -0.33 H4K12ac 0.29 0.28 H3K18ac -0.27 H3K36me1 -0.27 H4K5ac -0.27 H3K9ac -H4K8ac -0.23 H3K79me2 -0.14 0 PCL -Rhino -0 0 dRING -0 Su(var)3-9 -KDM4A -0 0 Su(var)3-7 -0 Psc -POF -0 0 Pho-0 Pc -MSL-1 -0 0 HP2 -PR-Set7 -0 **HP4** -0 0 HP1a -H3K27me3 -0 0 H3K4me2 -0 BEAF-32 -CG10630 -0 CP190 -0 0 CTCF -Chriz -0 Enhancer-of-zeste -0 0 H1 -0 H2BK5ac -0 H2Bubi -0 H3 -H3K23ac -0 0 H3K27me1 -H3K27me2 -0 H3K36me3 -0 0 mod(mdg4) -H3K79me1 -0 H4acTetra -0 0 H3K9acS10P -H3K9me2 -0 H3K9me3 -0

NURF301 -0.11 H4K16ac -0.11JIL-1 -0.11 H3K4me1 -0.11 H2Av -0.17 H3K9me1 -0.23 0.24 MBD-R2 -0.25 Polli -Su(Hw) -0.27 0.3 HP1b -0.3 HP1c -0.34 MLE -IHDM1 -0.35 ZW5 -0.36 ASH-1 -0.39 -15 -log10 p-value -10-5 log2 enrichment

5