

**Table S1: Summary of CPD Repair Activity in Different Chromatin States**

Chromatin Type	Overall Repair <sup>a,b</sup>	TS Repair <sup>a,b</sup>	NTS Repair <sup>a,b</sup>	Transcriptional Repair Asymmetry <sup>a,c</sup>	Median RPKM <sup>d</sup>	Nucleosome Repeat Length	Translational Repair Period <sup>e</sup>
Repressive Chromatin	-0.577	-0.440	-0.559	0.119	0.000	184.8	184.8
PcG Heterochromatin	0.052	0.279	-0.017	0.296	0.174	183.2	183.8
Centromeric Chromatin	-0.302	0.241	-0.687	0.928	23.022	179.1	-- <sup>f</sup>
Inducible Euchromatin	1.080	1.422	0.427	0.995	28.655	181.2	-- <sup>f</sup>
Constitutive Euchromatin	0.150	0.389	-0.401	0.790	29.604	173.9	173.7

<sup>a</sup> Repair activity measured 30 minutes after UV exposure and normalized to cellular damage data

<sup>b</sup> Data displayed as:  $\log_2(\text{repair} / \text{damage})$

<sup>c</sup> Data displayed as:  $\log_2([\text{TS repair} / \text{TS damage}] / [\text{NTS repair} / \text{NTS damage}])$

<sup>d</sup> Reads Per Kilobase per Million mapped reads, a measure of transcription of genes resident in each chromatin state

<sup>e</sup> Derived from repair activity measured 30 minutes after UV exposure and normalized to cellular damage data

<sup>f</sup> Translational repair periods omitted where no clear signal was present