

**Table S4: The  $p$ -value of Wilcoxon rank-sum test (one side) for each mark distributed across up-regulated genes between 0 Gy and 50 Gy**

FPKM	H3K4ac	H3K27ac	H4K12ac	H3K4me1	H3K4me3	H3K27me3	H3K36me3
>50	0.33760	0.00713	< 2.2e-16	1.63E-13	8.67E-05	0.00023	0.03123
10~50	0.002004	0.00024	< 2.2e-16	< 2.2e-16	2.95E-06	< 2.2e-16	2.66E-05
1~10	1.84E-11	0.14530	< 2.2e-16	< 2.2e-16	0.42770	5.48E-13	0.01675
<1	0.005122	0.13250	0.00087	1.87E-14	0.00076	0.01933	0.20770