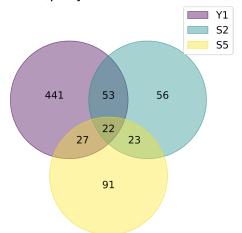


up-regulated (padj < 0.05, I2FC > 0.1) PCGs



В

p53 Signaling Pathway Homo sapiens h p53Pathway

IL-2 Receptor Beta Chain in T cell Activation Homo sapiens h il2rbPathway

Cyclins and Cell Cycle Regulation Homo sapiens h cellcyclePathway

BTG family proteins and cell cycle regulation Homo sapiens h btg2Pathway

Cell Cycle: G1/S Check Point Homo sapiens h g1Pathway

Influence of Ras and Rho proteins on G1 to S Transition Homo sapiens h RacCycDPathway

RB Tumor Suppressor/Checkpoint Signaling in response to DNA damage Homo sapiens h rbPathway

Hypoxia and p53 in the Cardiovascular system Homo sapiens h p53hypoxiaPathway

Cell Cycle: G2/M Checkpoint Homo sapiens h g2Pathway

Growth Hormone Signaling Pathway Homo sapiens h ghPathway

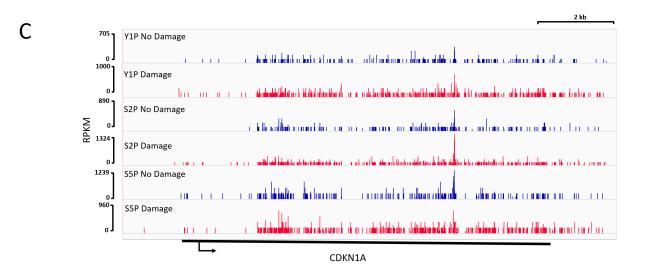


Figure S2. Analysis of up-regulated protein-coding genes upon DNA damage. **A)** Venn diagram of significantly up-regulated (padj < 0.05, $log_2FC > 0.1$) protein-coding genes based on read coverage across gene body from Y1P, S2P and S5P sample2s after IR. **B)** GO enrichment of significantly up-regulated genes across Y1P, S2P, S5P samples upon IR. **C)** IGV profile of mNET-seq signal across a representative up-regulated gene, CDKN1A.