

Description of Additional Supplementary Files

File name- Supplementary Data 1:

File description Clinical metadata of enrolled HCC patients.

File name- Supplementary Data 2:

File description Quality metrics for all WGBS and ChIP-seq datasets.

File name- Supplementary Data 3:

File description- List of primers.

File name- Supplementary Data 4:

File description- List of DMRs and PMDs in HCC.

File name- Supplementary Data 5:

File description- List of dysregulated genes and retrotransposons in HCC.

File name- Supplementary Data 6:

File description- List of dysregulated promoters, typical enhancers, and SEs in HCC.

File name- Supplementary Data 7:

File description- List of dysregulated RT-promoters and RT-typical enhancers in HCC.

File name- Supplementary Data 8:

File description- Expressions of HERVE-int and THE1D in HCC patients within the TCGA-LIHC cohort.

File name- Supplementary Data 9:

File description- List of dysregulated genes in HERVE-int-depleted PLC cells and THE1D-depleted HepG2 cells.

File name- Supplementary Data 10:

File description- List of public data.

File name- Supplementary Data 11:

File description- Source data for main figures.

File name- Supplementary Data 12:

File description- Source data for supplementary figures.