Figure S1. (A) Map of the shuttle plasmid pHBLV-U6-MCS-CMV-ZsGreen-PGK-PURO and (B) the linkage of the targeted shRNA after double enzymatic digestion.

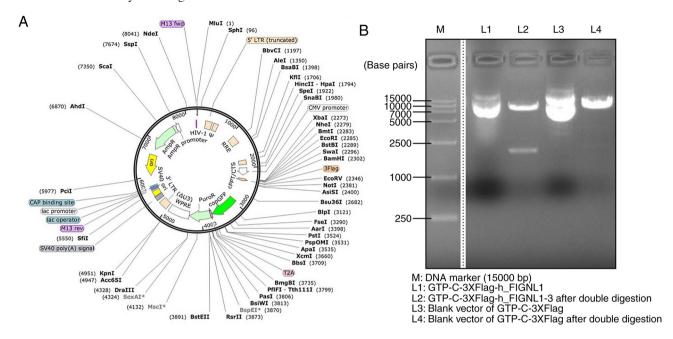


Figure S2. cDNA microarray analysis of *HIST1H3D* knockout cells as shown in (A) heatmap, (B) KEGG and (C) GO analysis report (5).

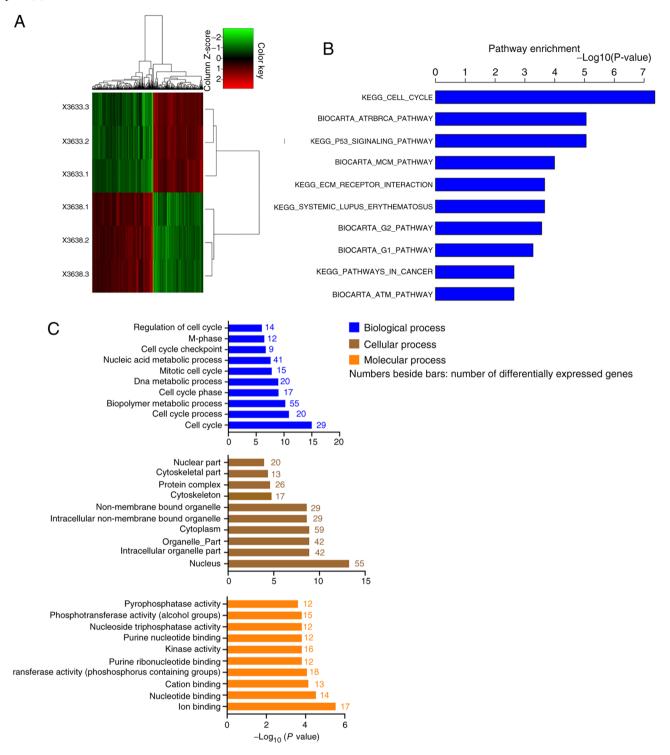


Figure S3. FIGNL1 was identified from HIST1H3D knockout cells. FIGNL1 shRNA transfection reduced cellular proliferation. Knockdown of FIGNL1 caused a 2.90-fold decrease in cell proliferation compared with that in the negative control group. \*\*\*P<0.001.

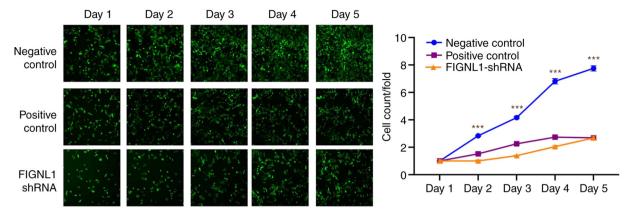
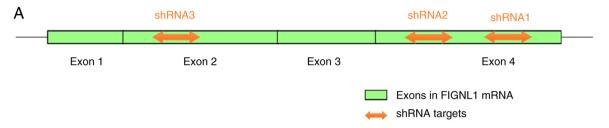
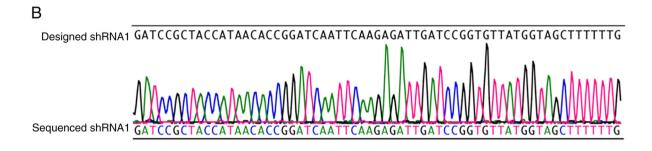
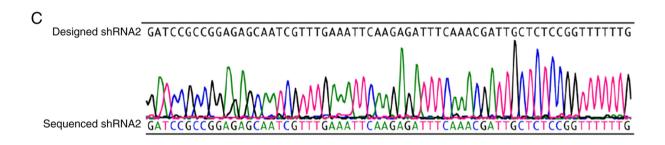


Figure S4. shRNA design. (A) shRNA targets in the FIGNL1 mRNA. Primer sequencing verifications of (B) shFIGNL1-1, (C) shFIGNL1-2 and (D) shFIGNL1-3.







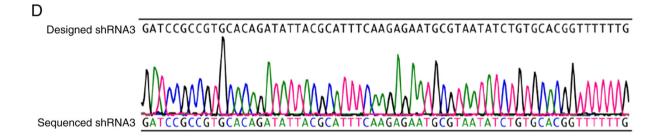


Figure S5. Lentiviral transfection efficiency using fluorescence following knockdown in both H1299 and A549 cells using 3 sets of shRNA.

