

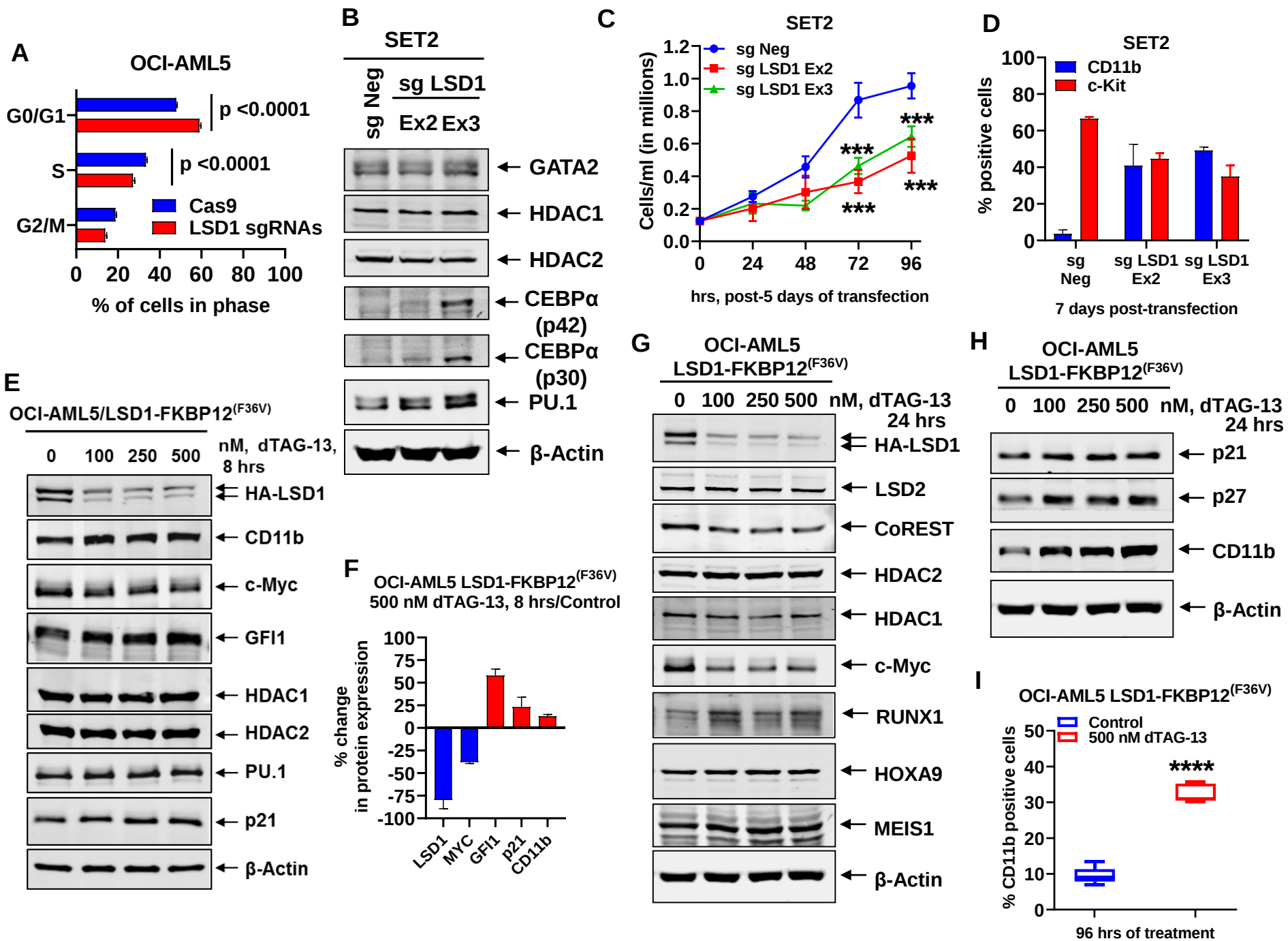


Figure S1

A

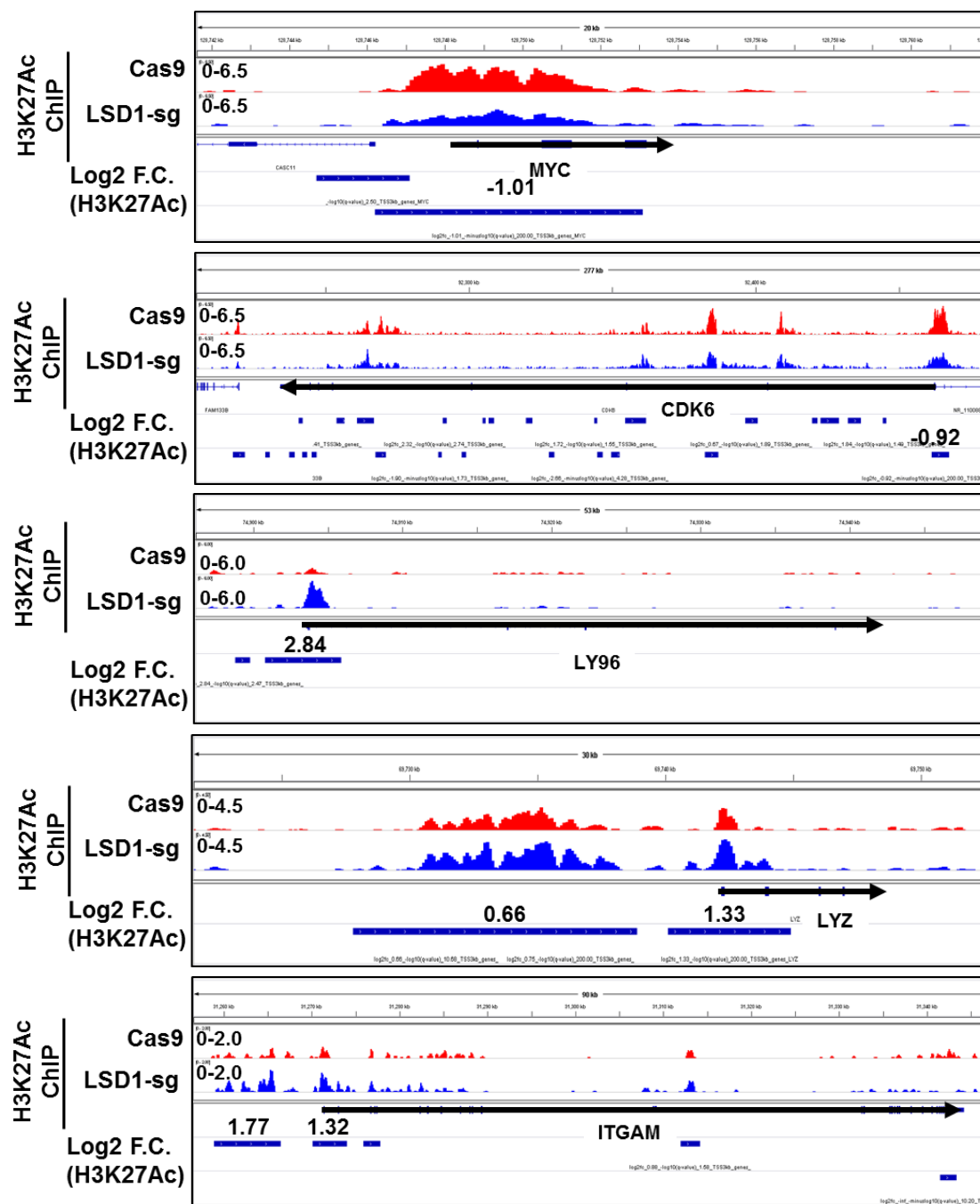
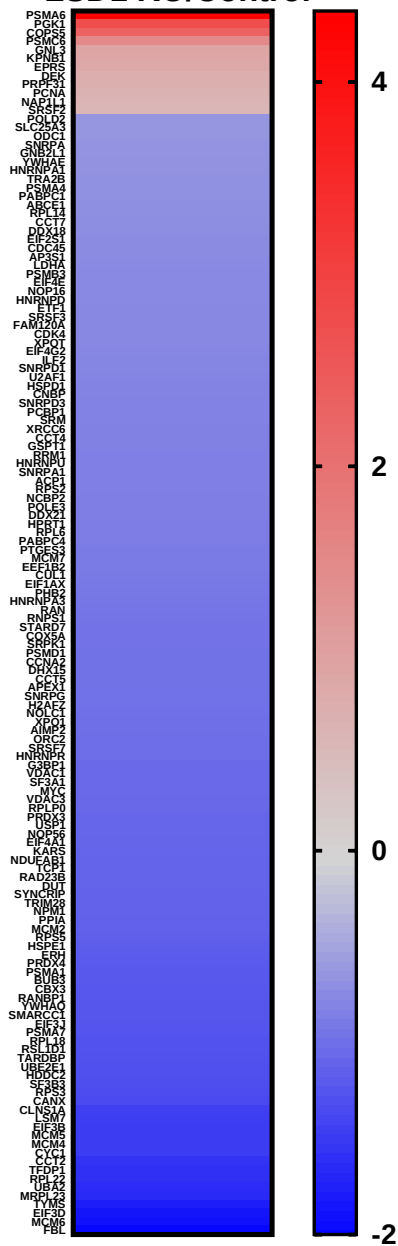


Figure S2

B

OCI-AML5
LSD1 KO/Control

MYC Target genes I

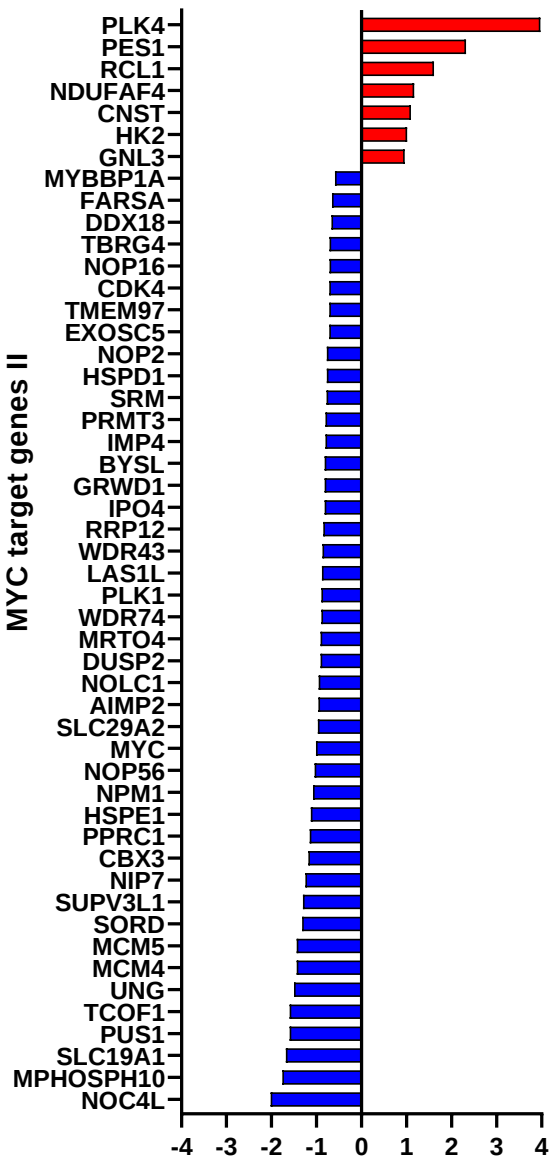


Log2 fold-change in H3K27Ac peaks
(TSS $\pm$ 3 kb/gene body $\pm$ 10 kb)

C

OCI-AML5
LSD1 KO/Control

MYC target genes II



Log2 fold-change in H3K27Ac peaks
(TSS $\pm$ 3 kb/gene body $\pm$ 10 kb)

Figure S2

D

BRD4 and H3K27Ac occupancy on the GFI1 gene and super enhancer following LSD1 knockout in OCI-AML5 cells

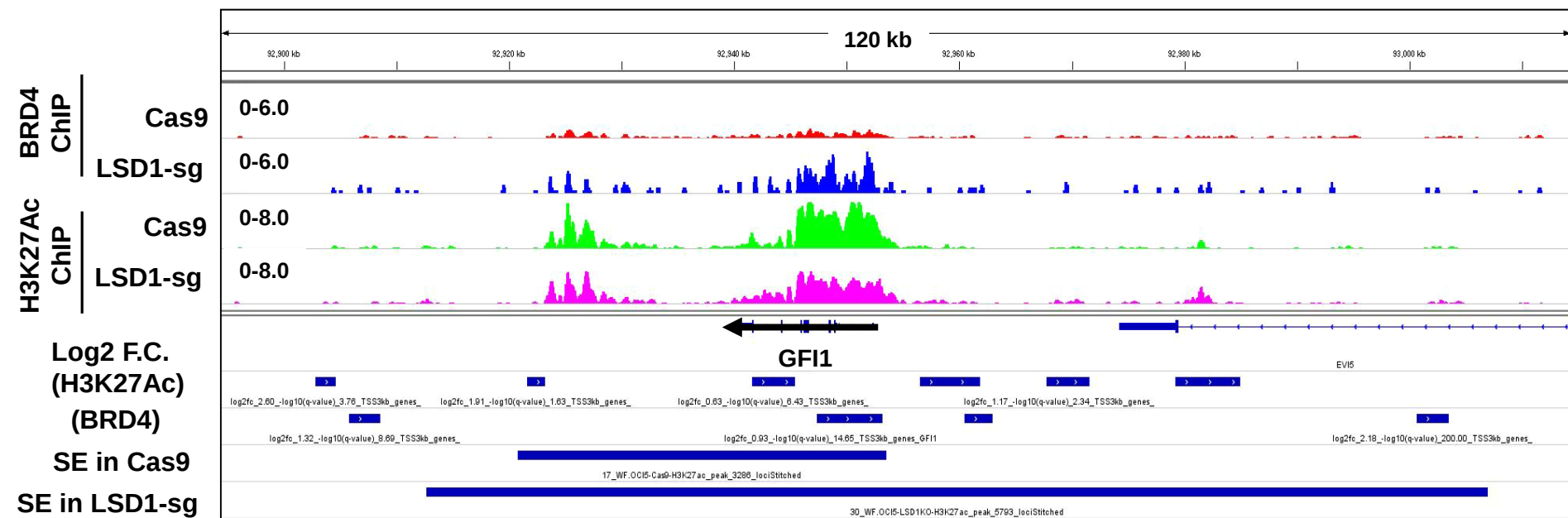


Figure S2

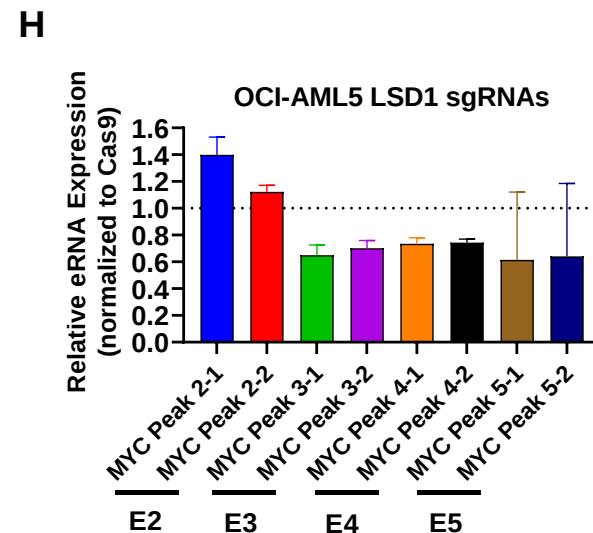
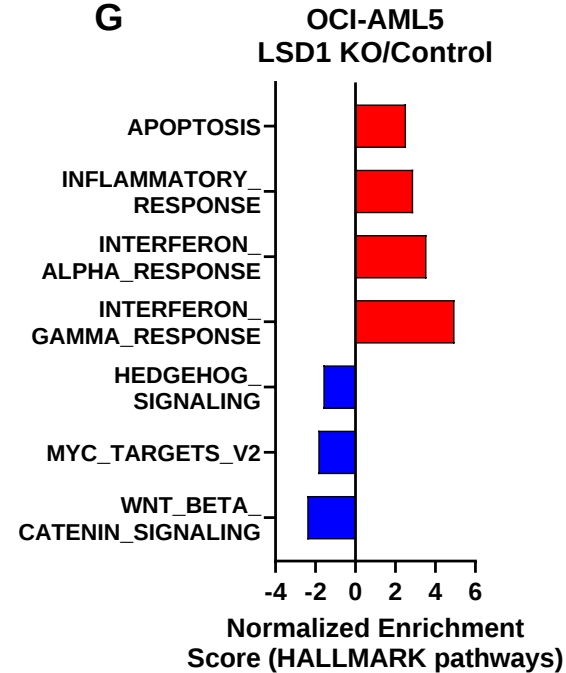
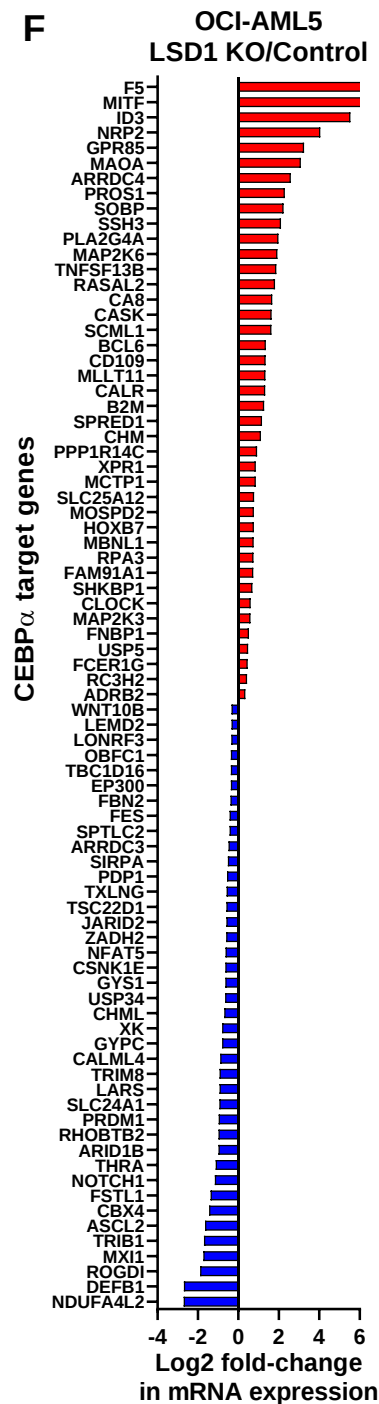
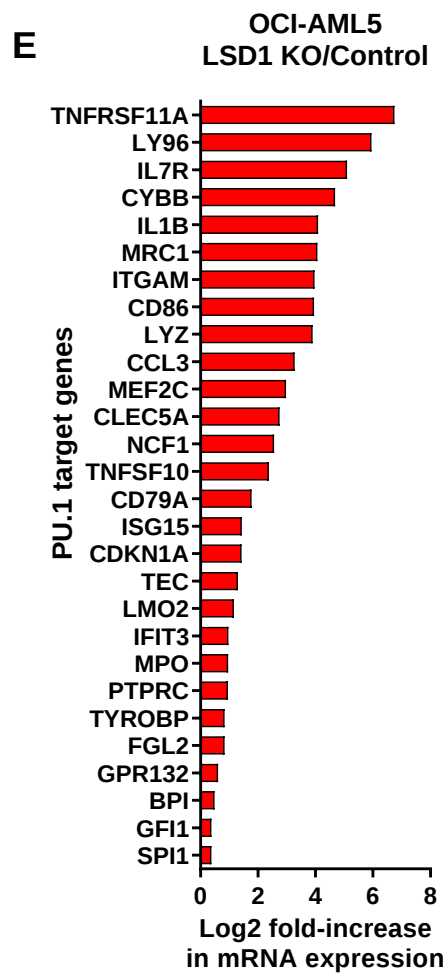
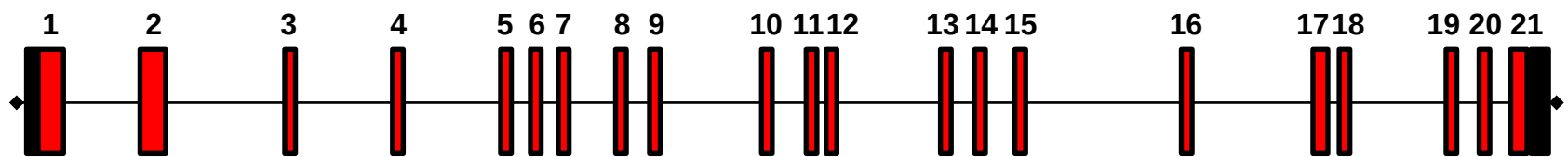


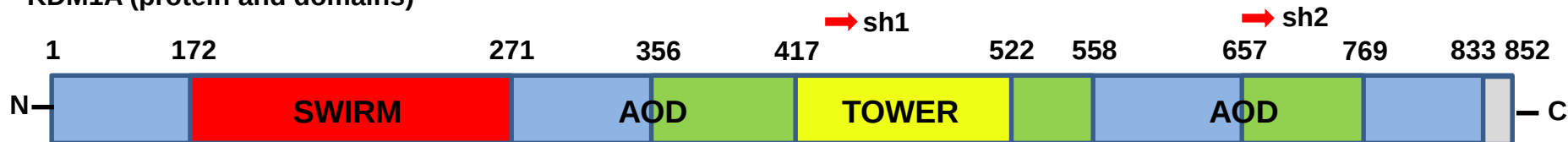
Figure S2

A

KDM1A (exon structure)



KDM1A (protein and domains)



Amine oxidase domain (AOD)

FAD binding sub-domain

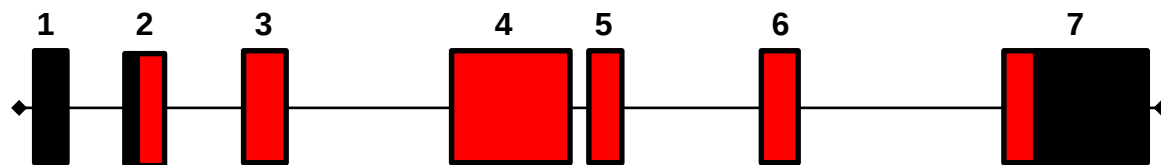
Substrate binding sub-domain

LSD1 sh1 = nt 1311-1331

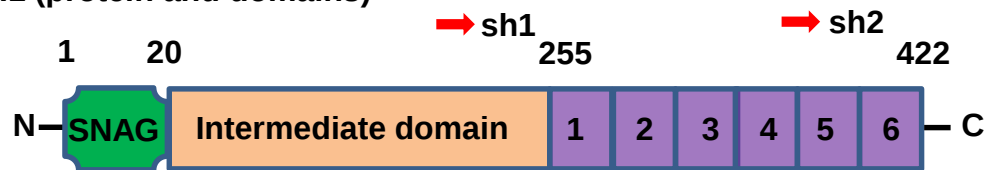
LSD1 sh2 = nt 1975-1995

B

GFI1 (exon structure)



GFI1 (protein and domains)



Zinc Finger domain

GFI1 sh1 = nt 669-689

GFI1 sh2 = nt 1090-1110

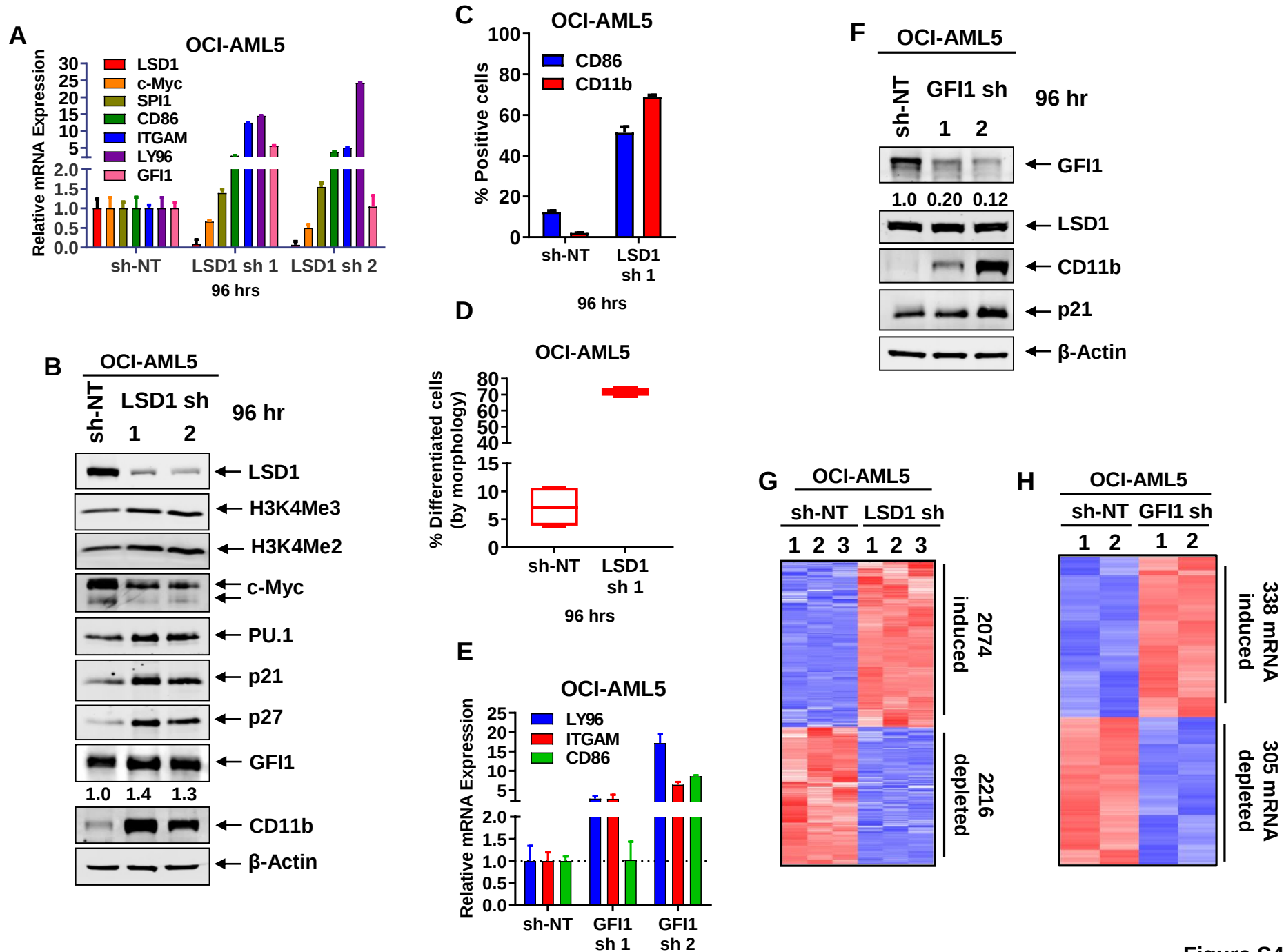


Figure S4

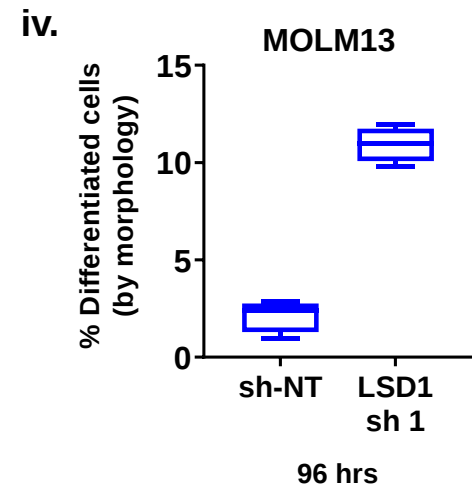
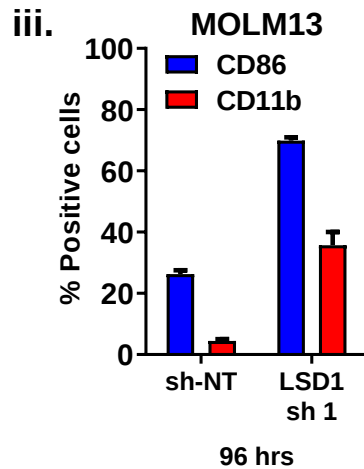
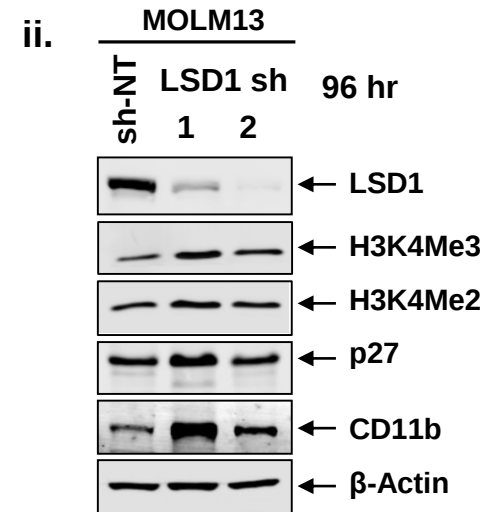
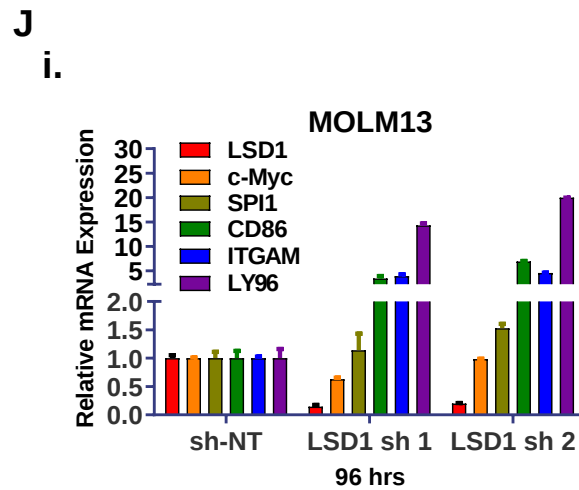
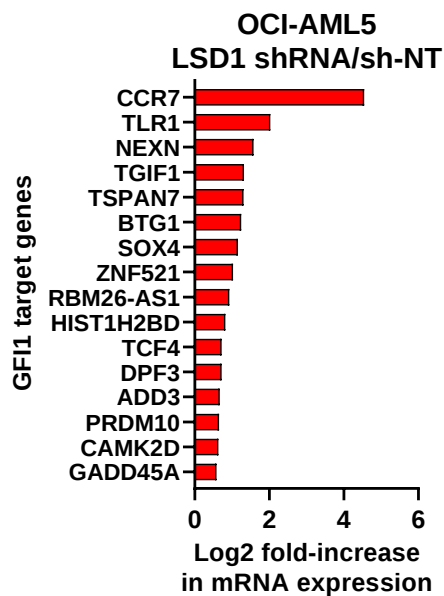
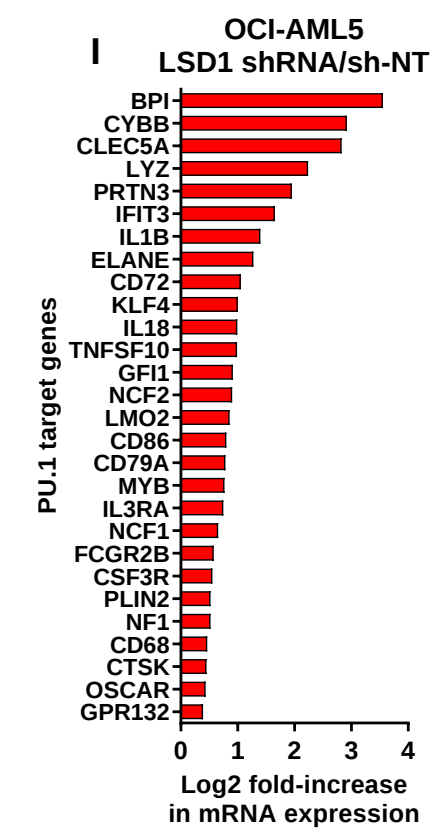
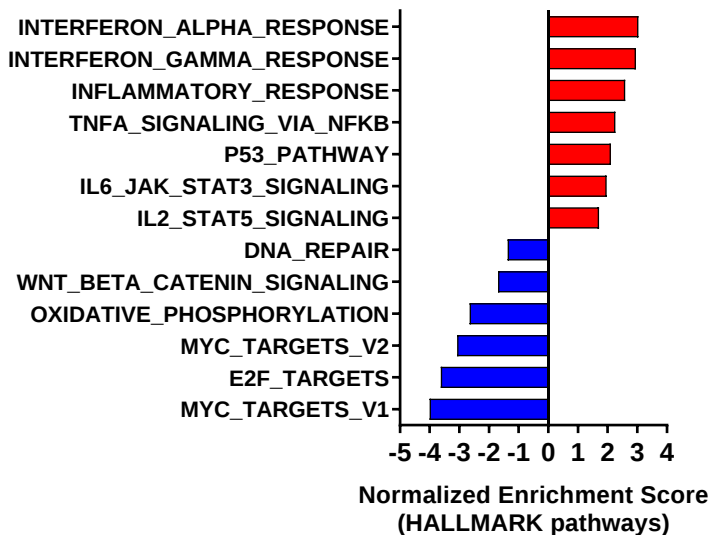
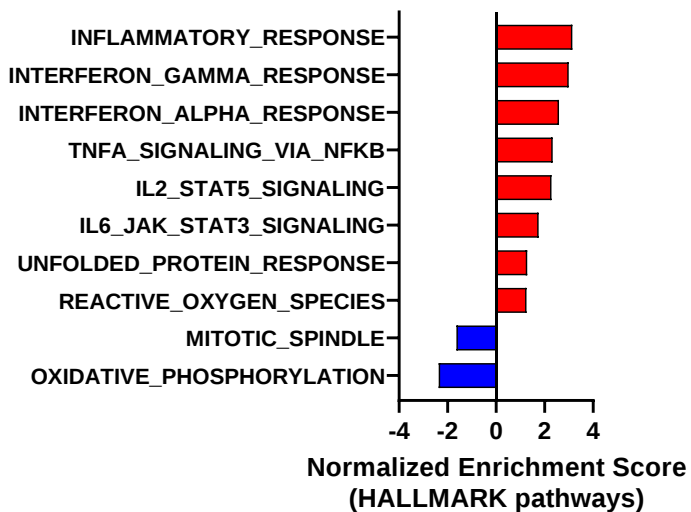
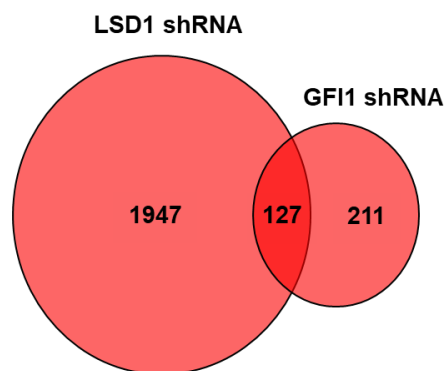
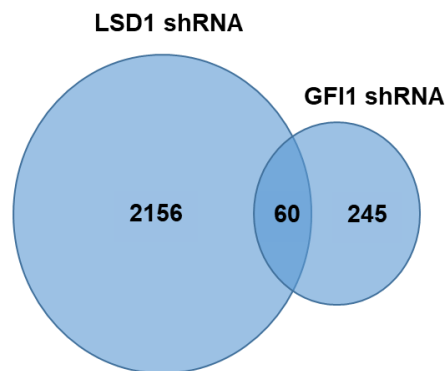
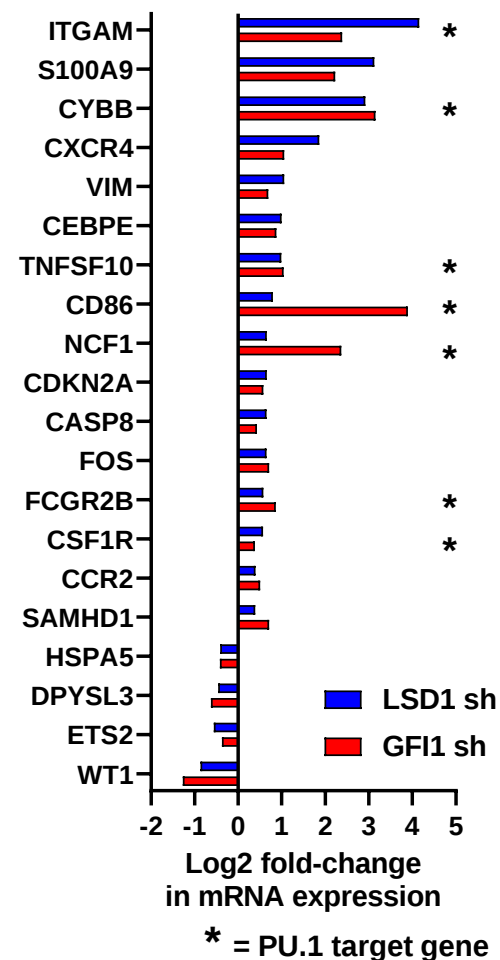


Figure S4

A**OCI-AML5 LSD1 shRNA/sh-NT****OCI-AML5 GFI1 shRNA/sh-NT****B****OCI-AML5 upregulated genes****OCI-AML5 depleted genes****C****OCI-AML5 shRNA/sh-NT****Figure S5**

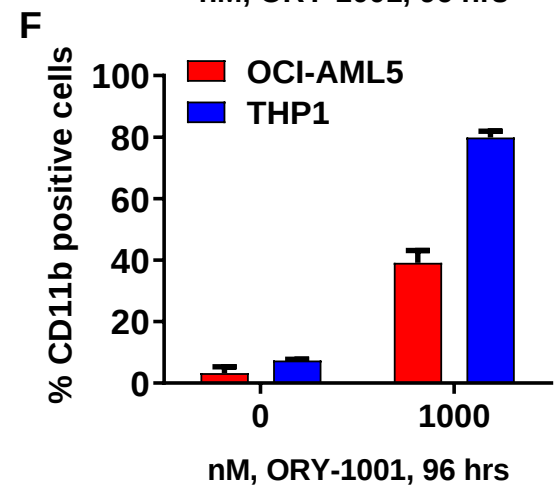
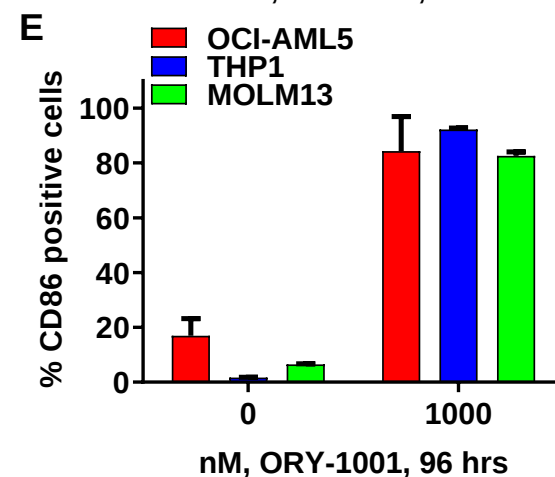
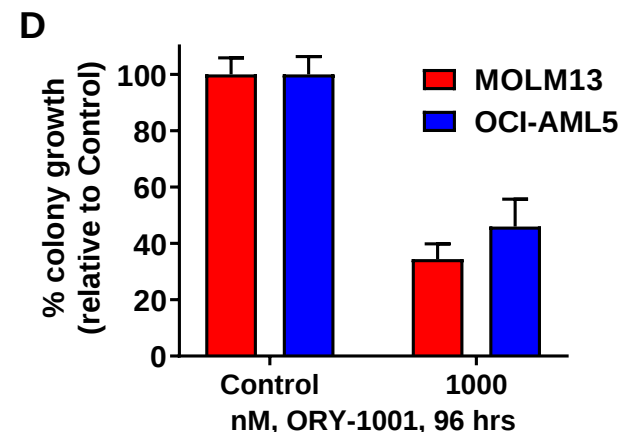
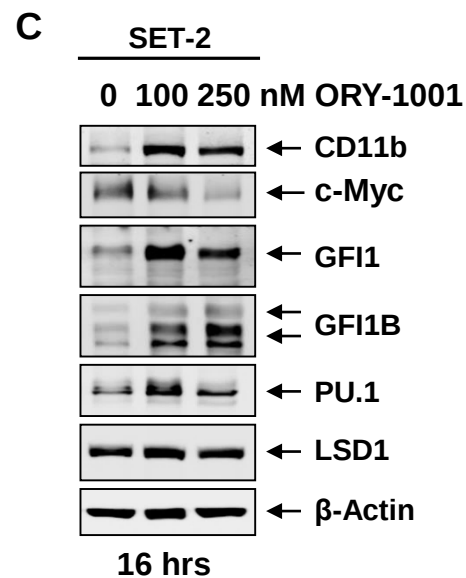
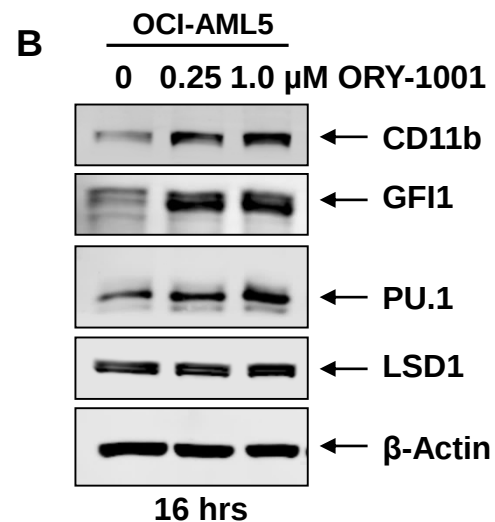
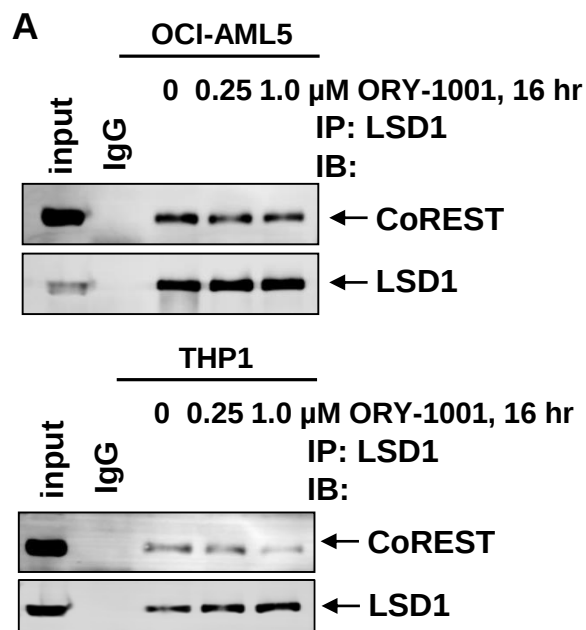


Figure S6

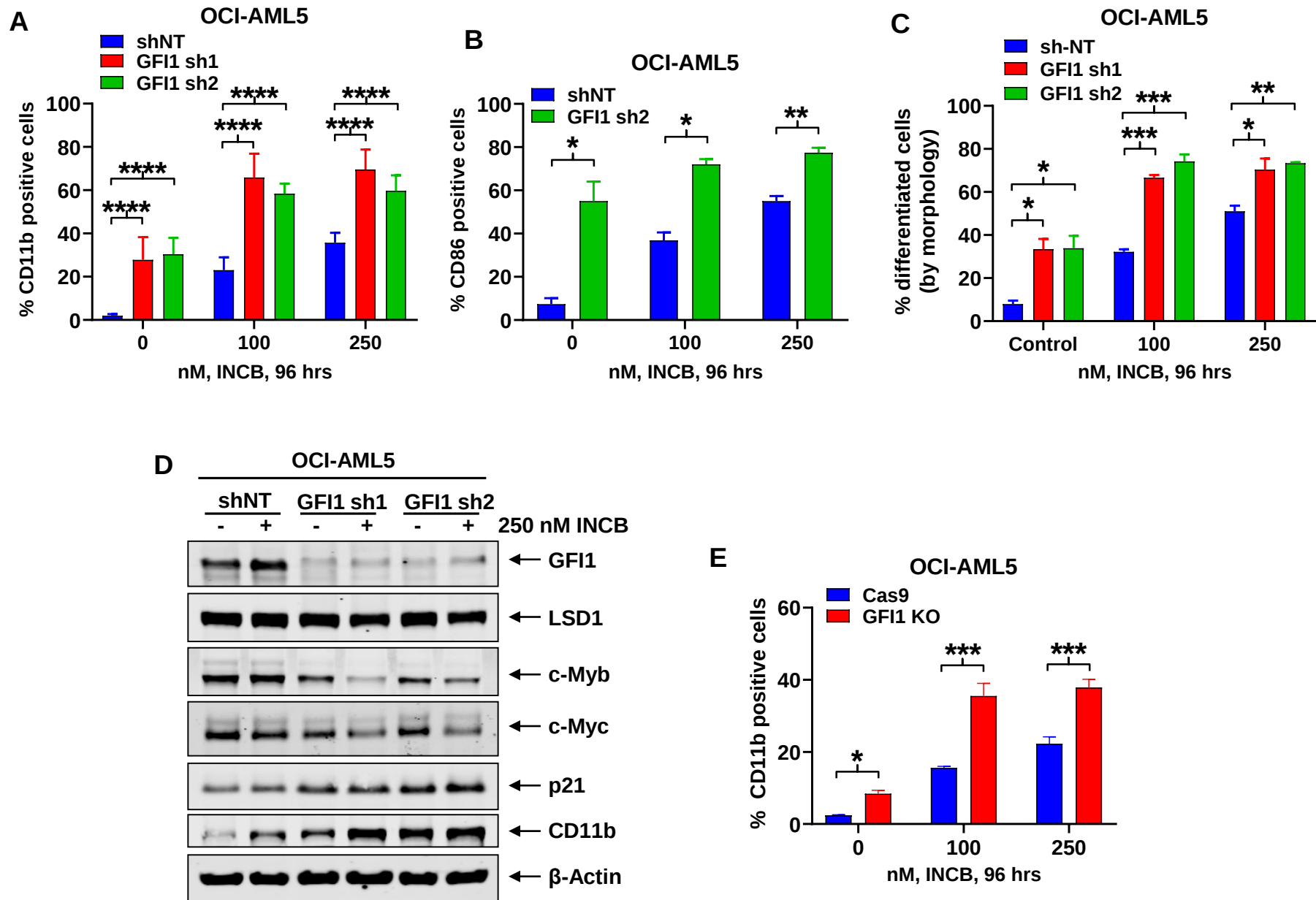
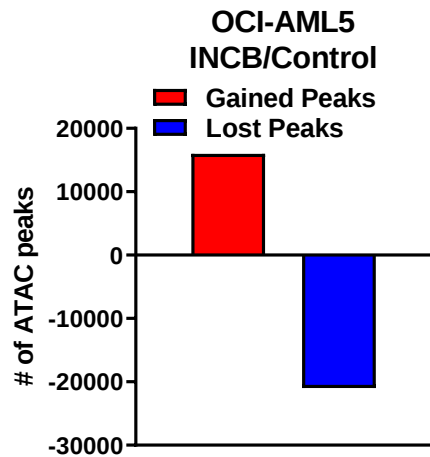
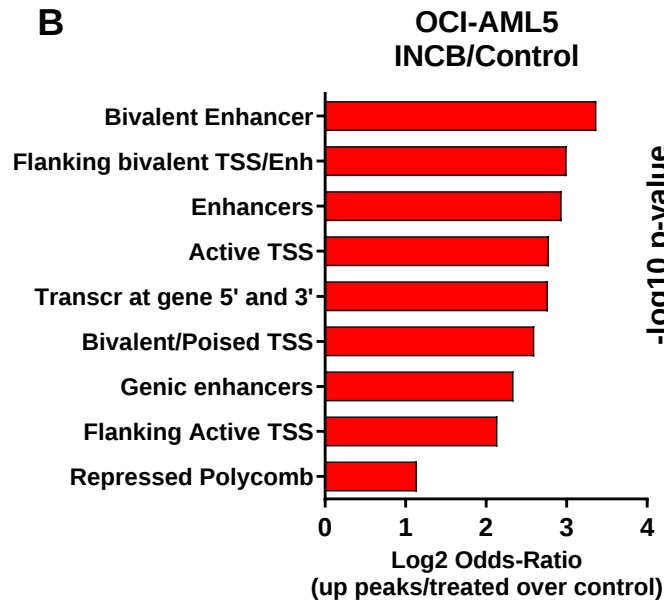


Figure S7

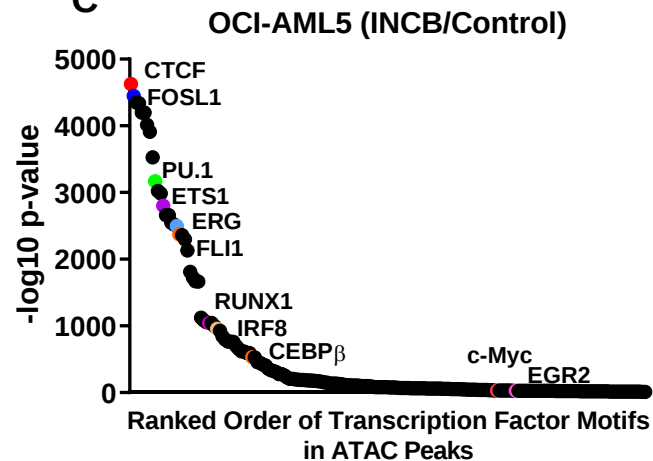
A



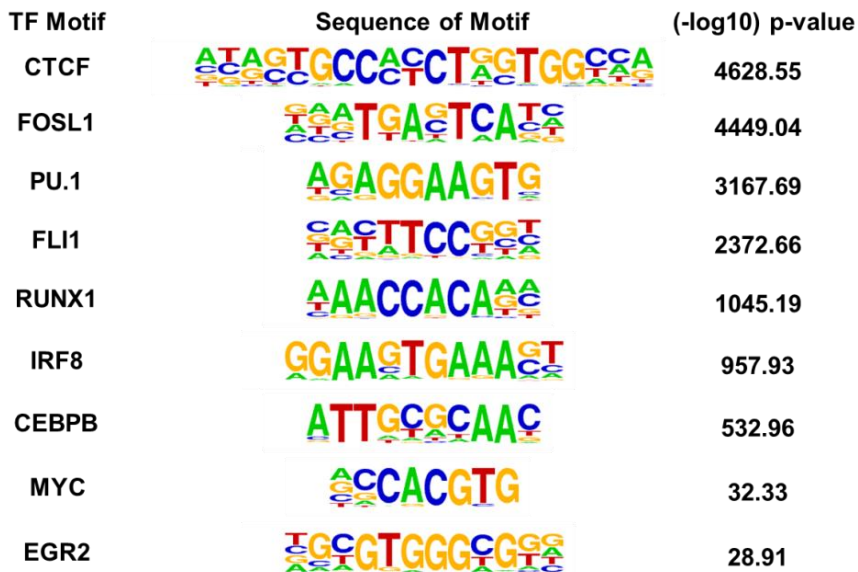
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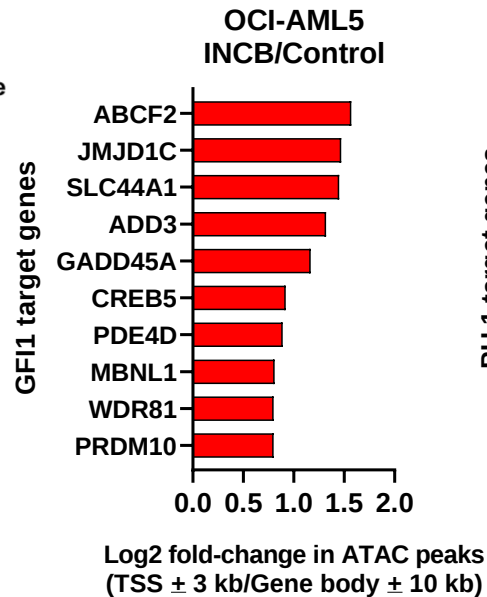
C



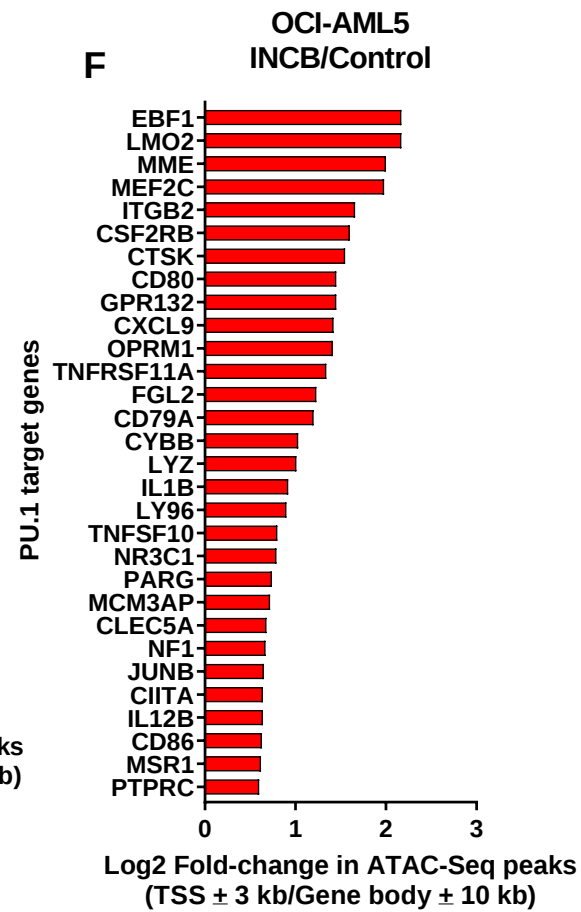
D Myeloid lineage Transcription Factor Motifs enriched in OCI-AML5 INCB-treated cells



E



F



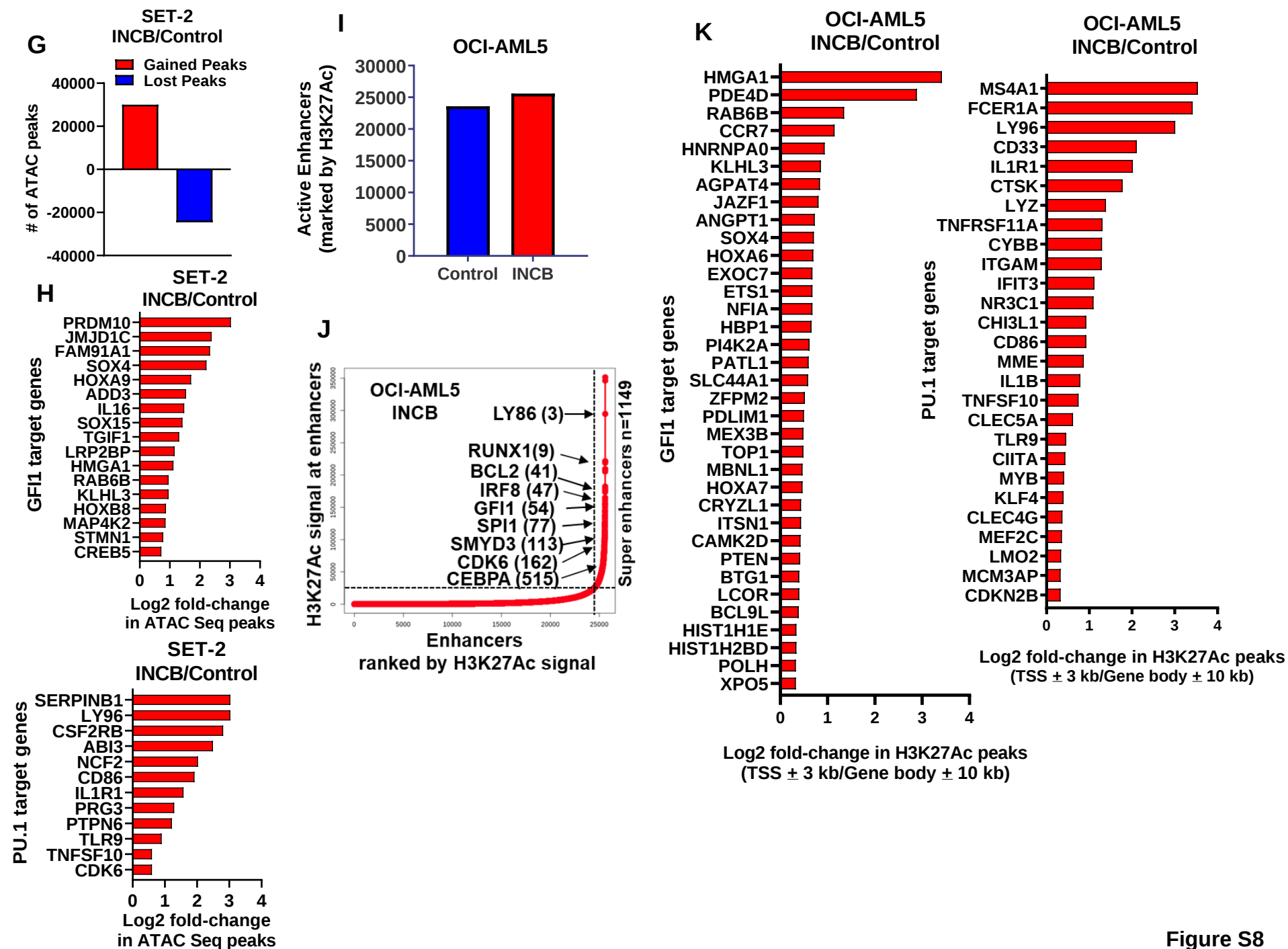


Figure S8

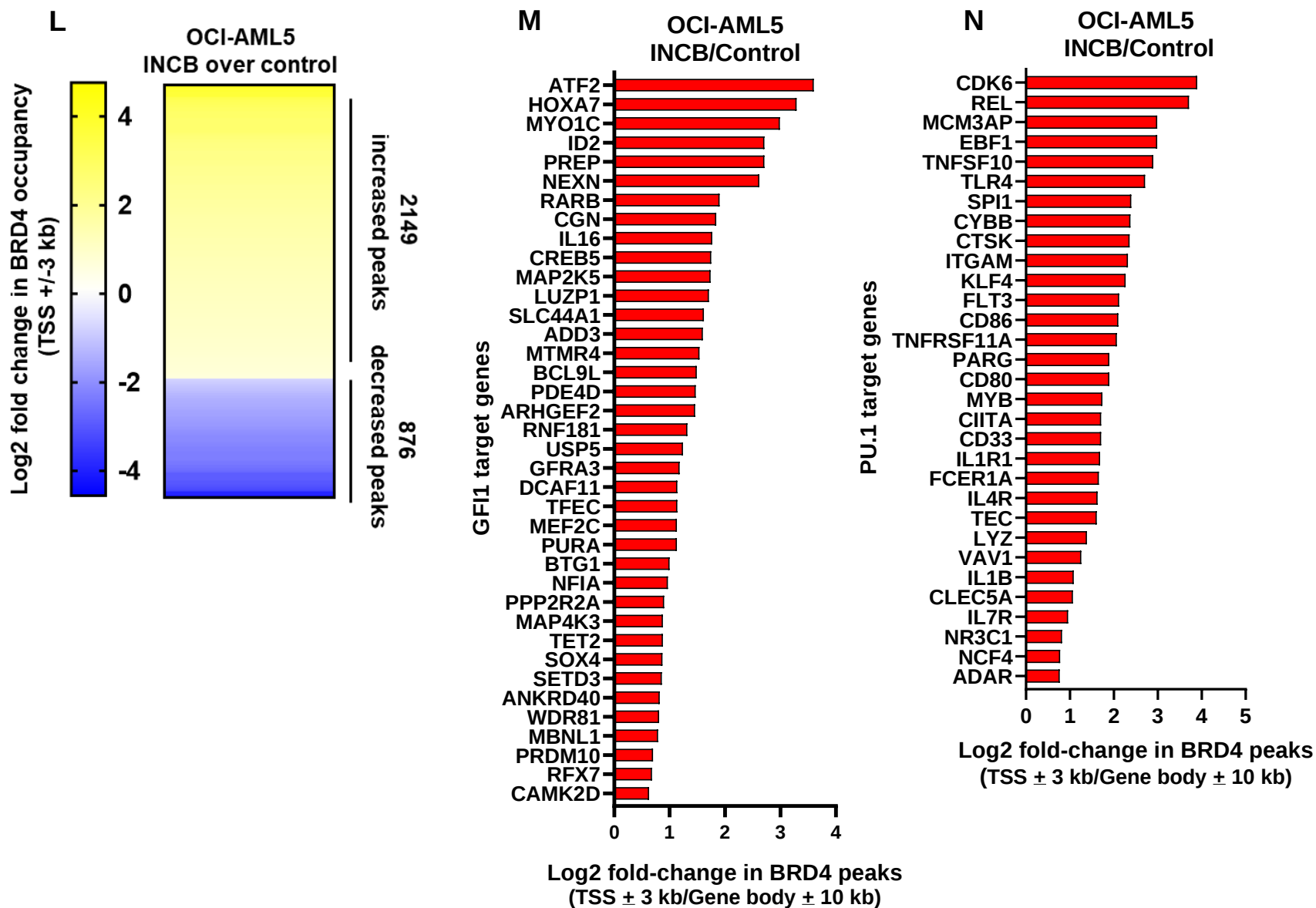


Figure S8

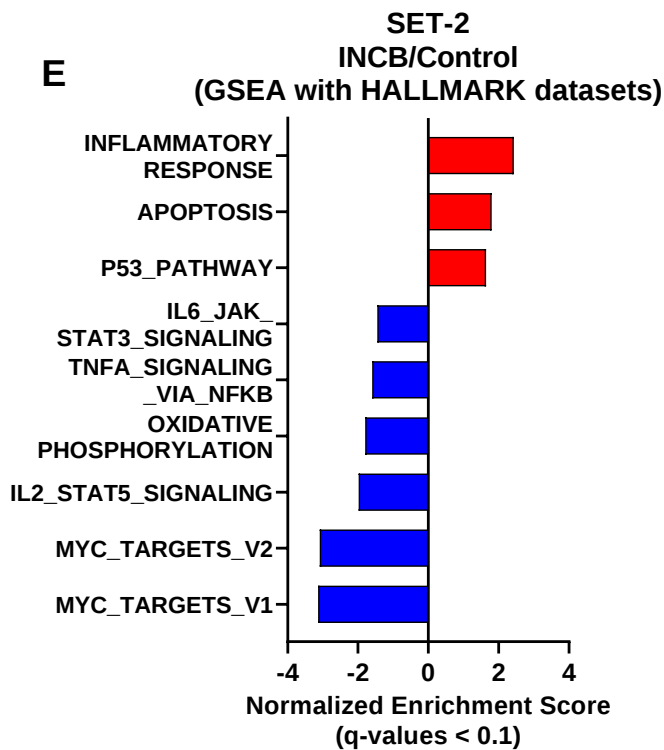
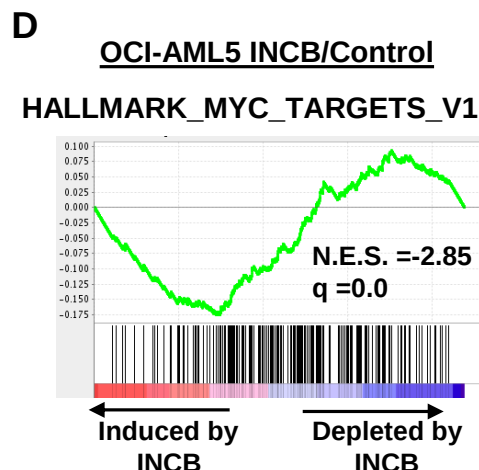
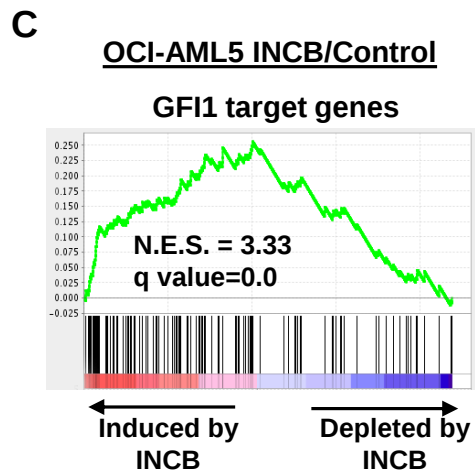
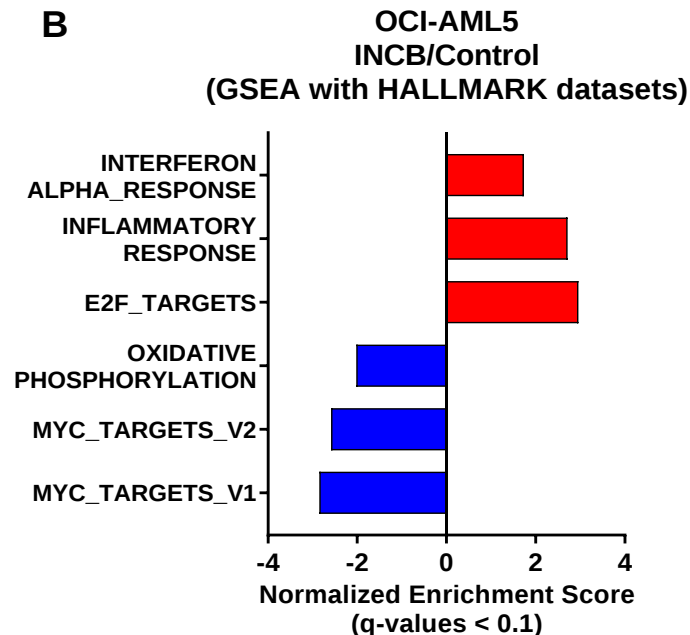
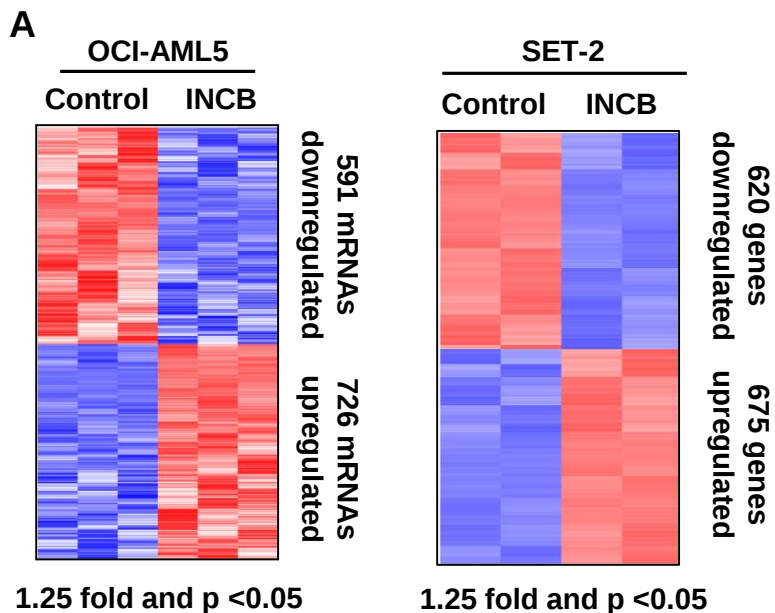


Figure S9

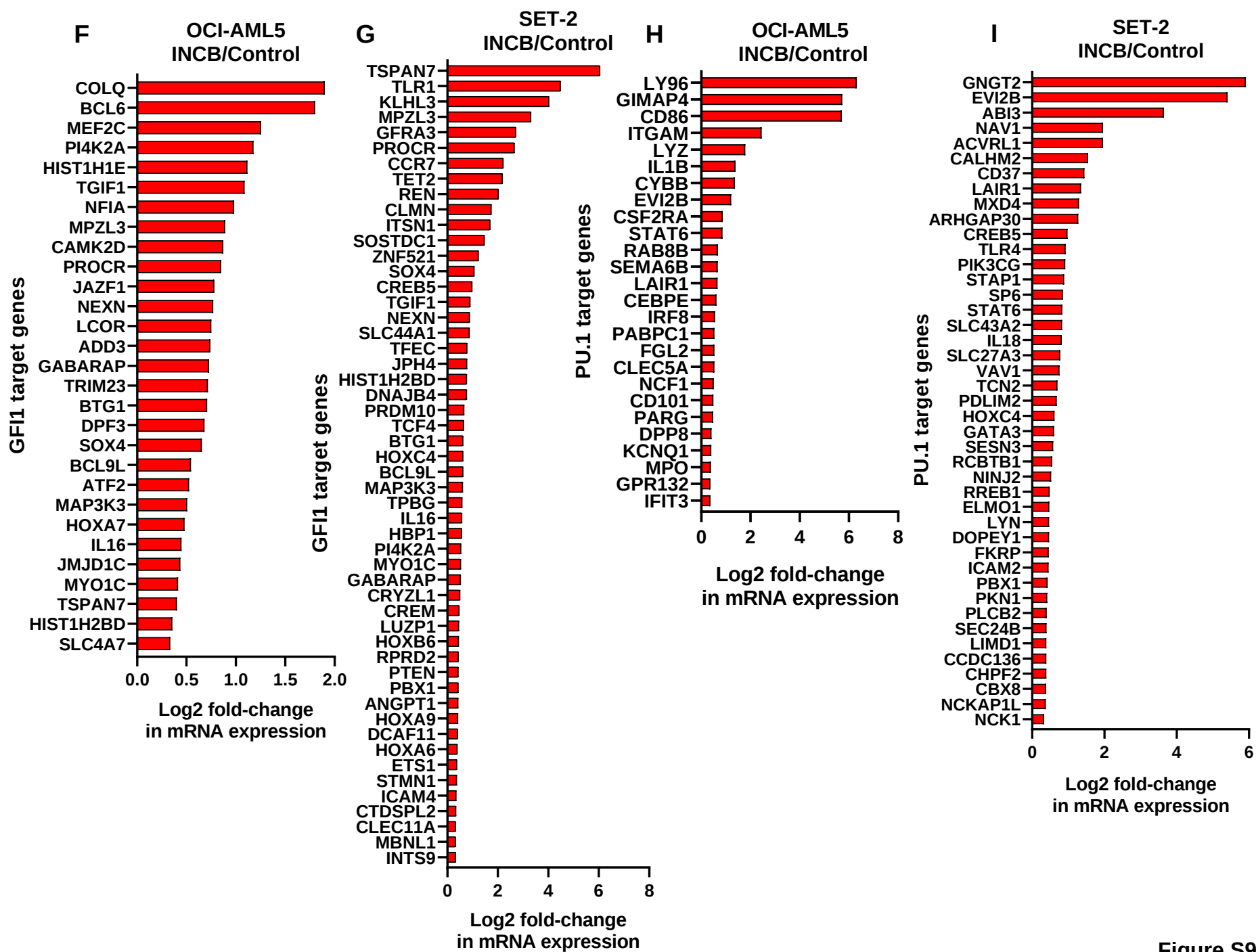


Figure S9

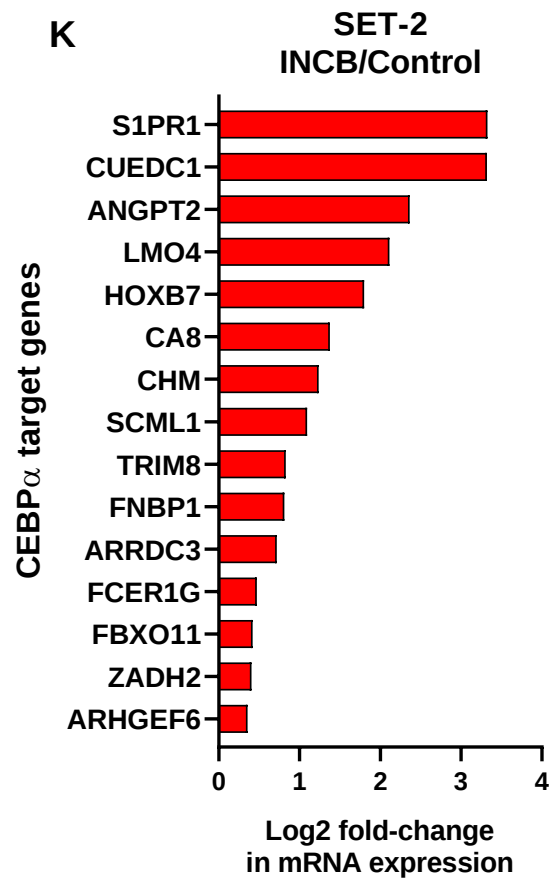
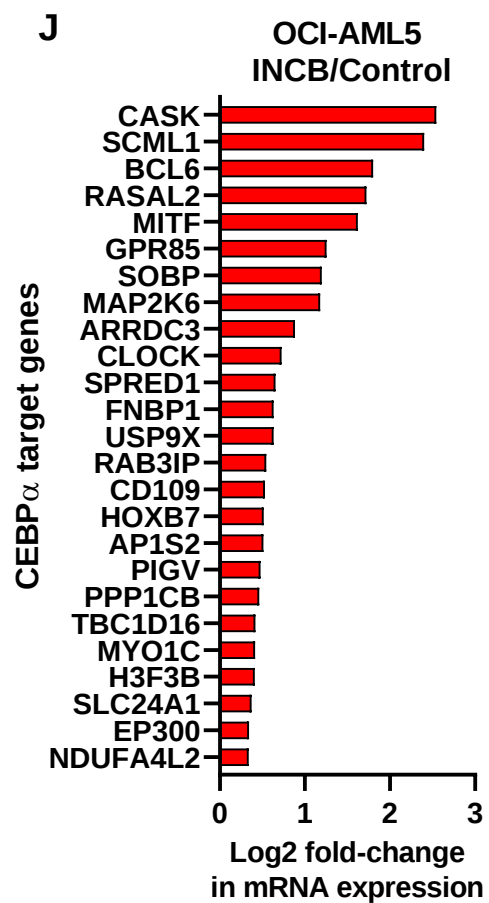


Figure S9

OCI-AML5 guide RNA library screen

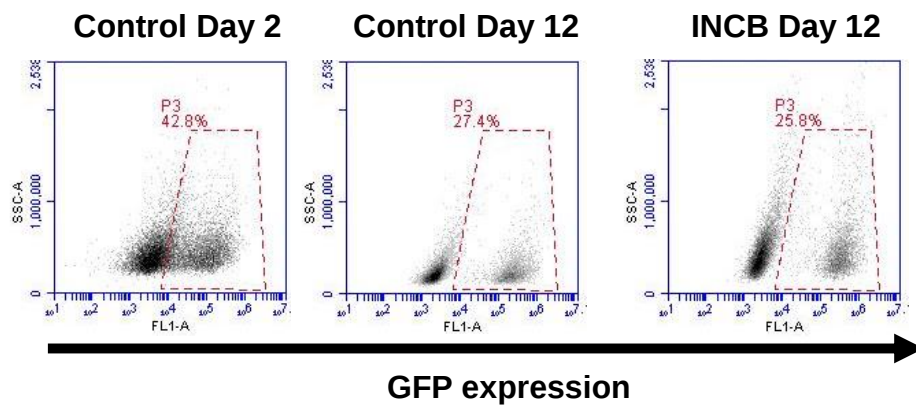


Figure S10

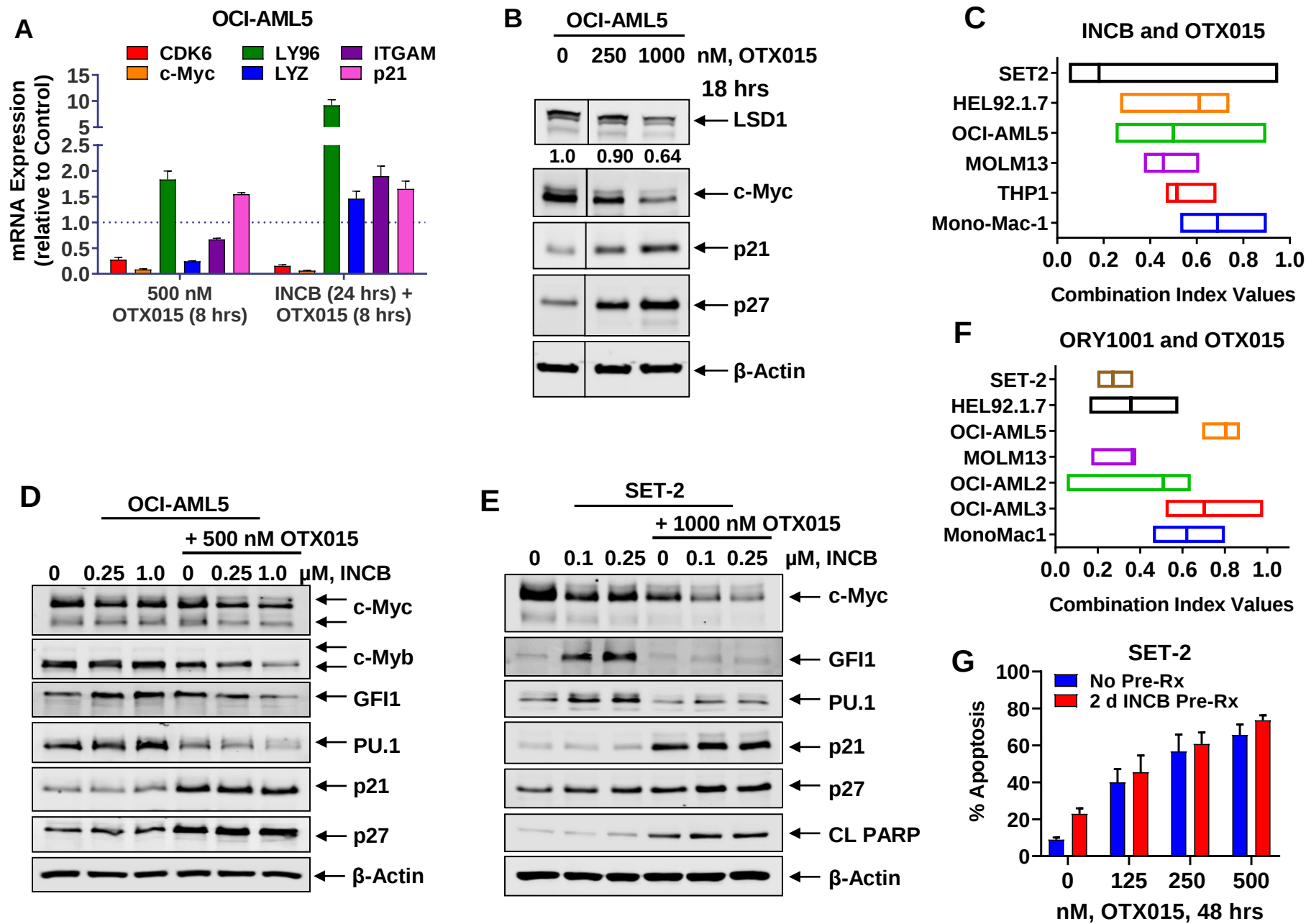
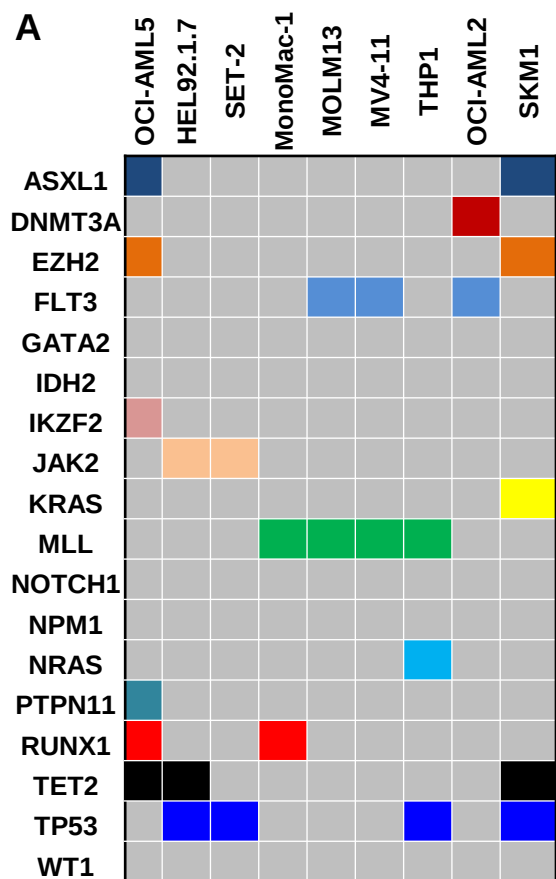


Figure S11



C Oncoplot of patient-derived de novo AML blasts

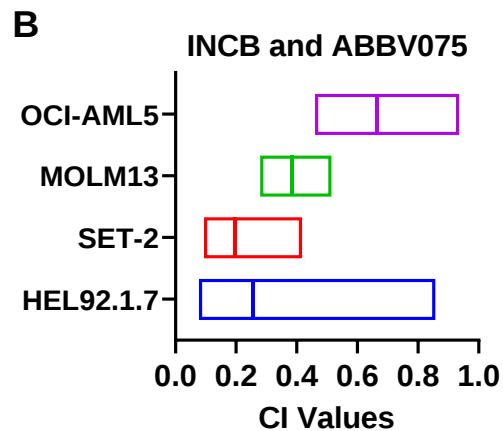
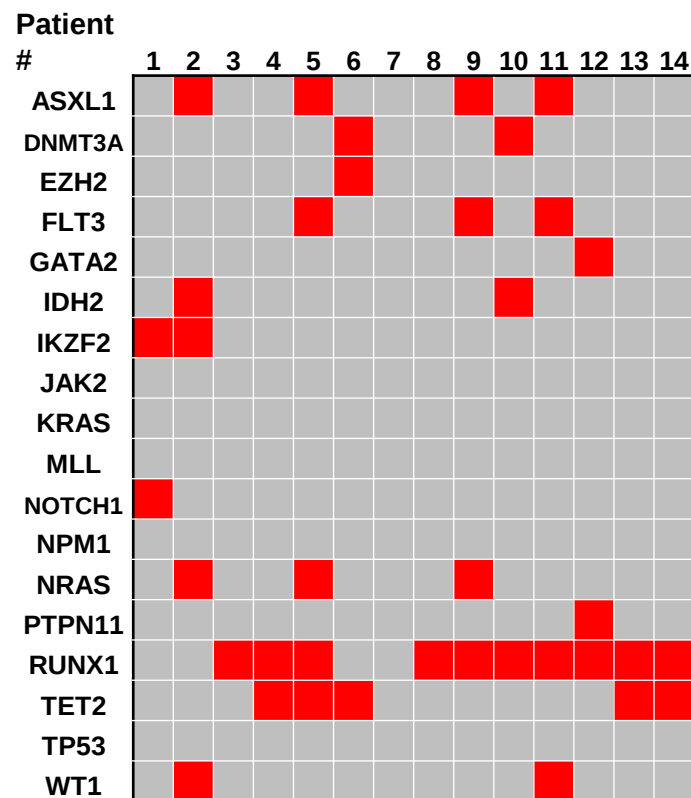


Figure S12

D Oncoplot of patient-derived post-MPN sAML blasts

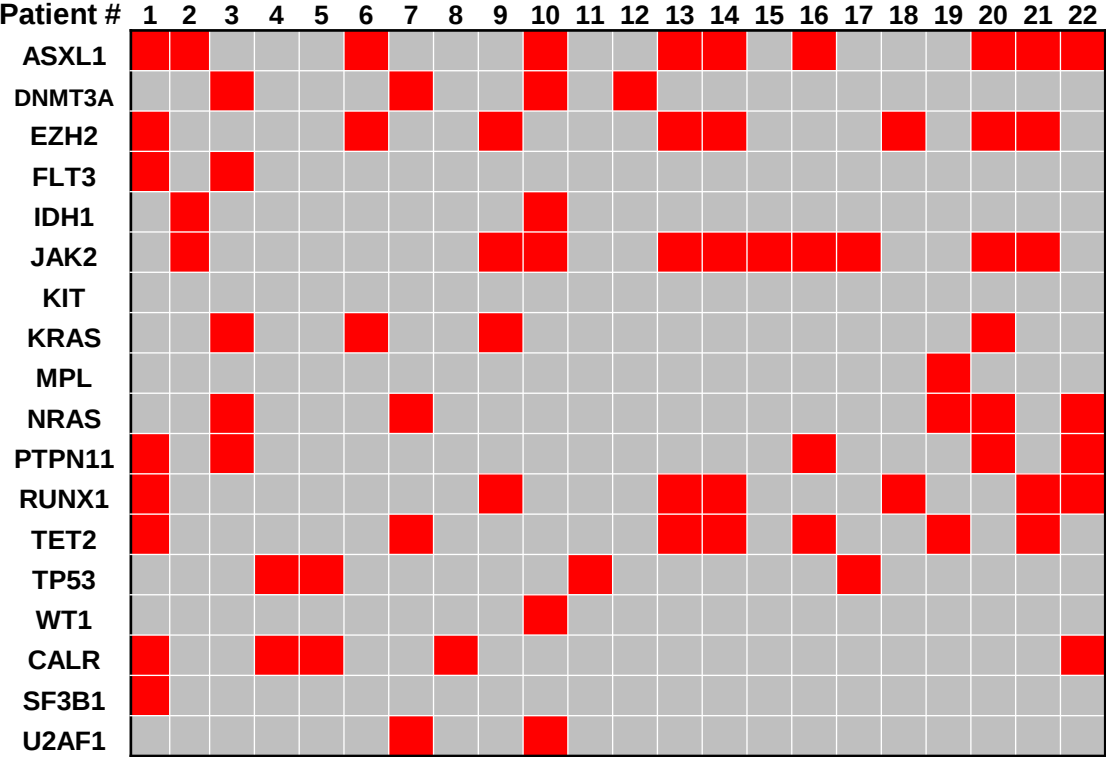


Figure S12

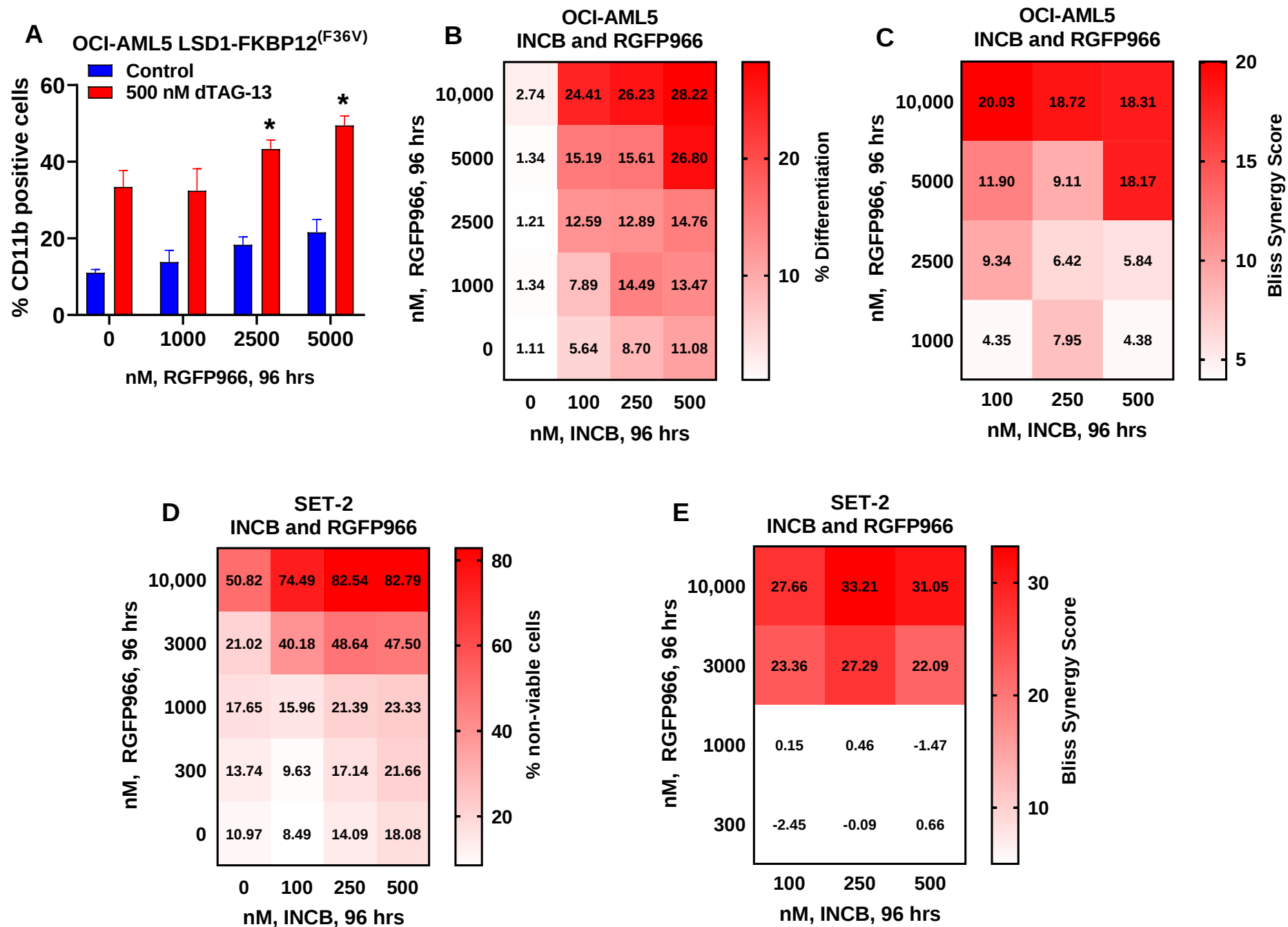


Figure S13

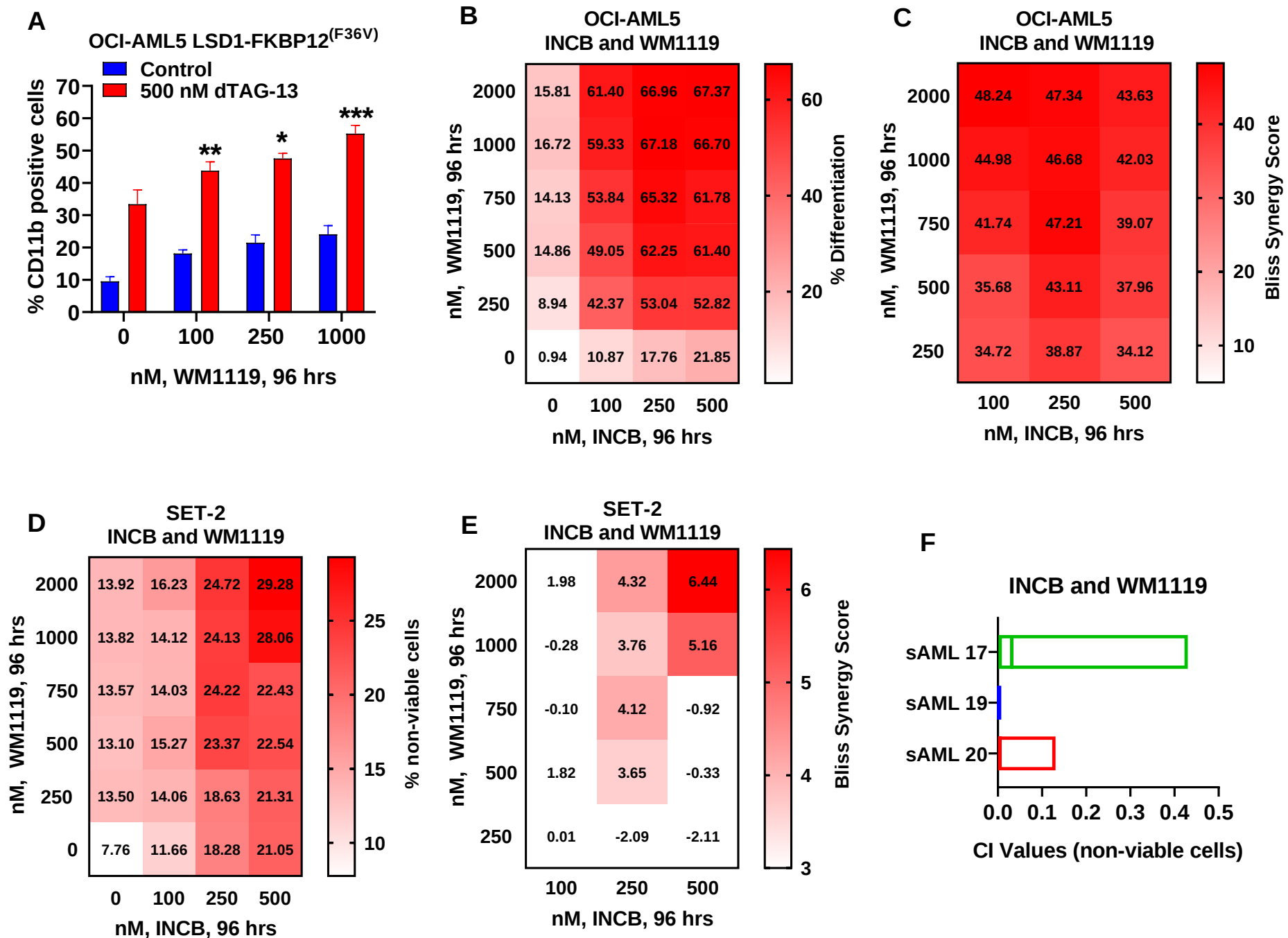


Figure S14

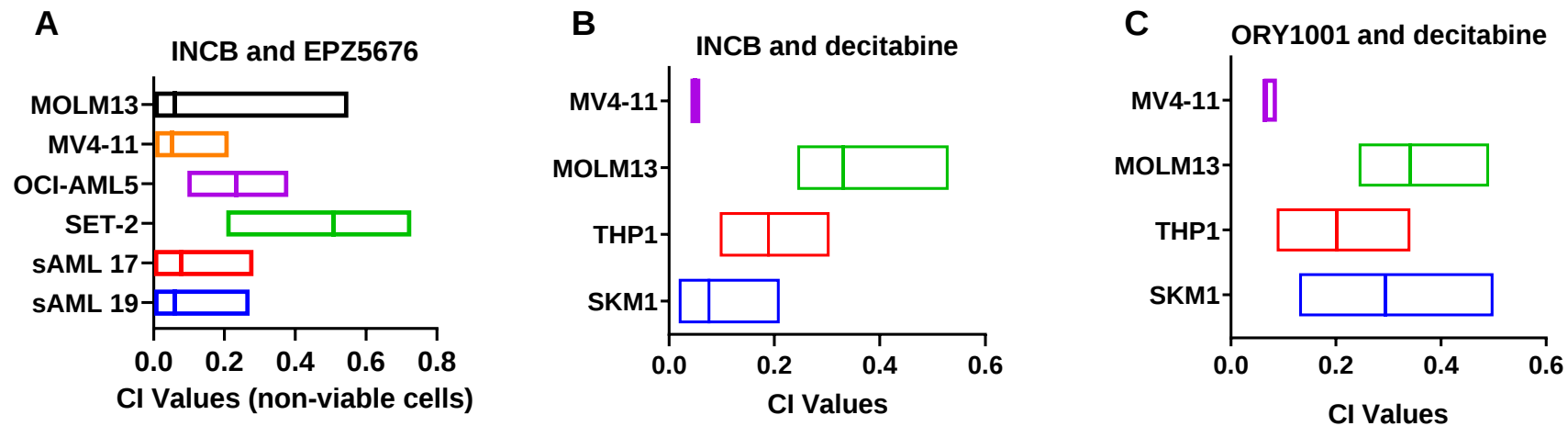


Figure S15

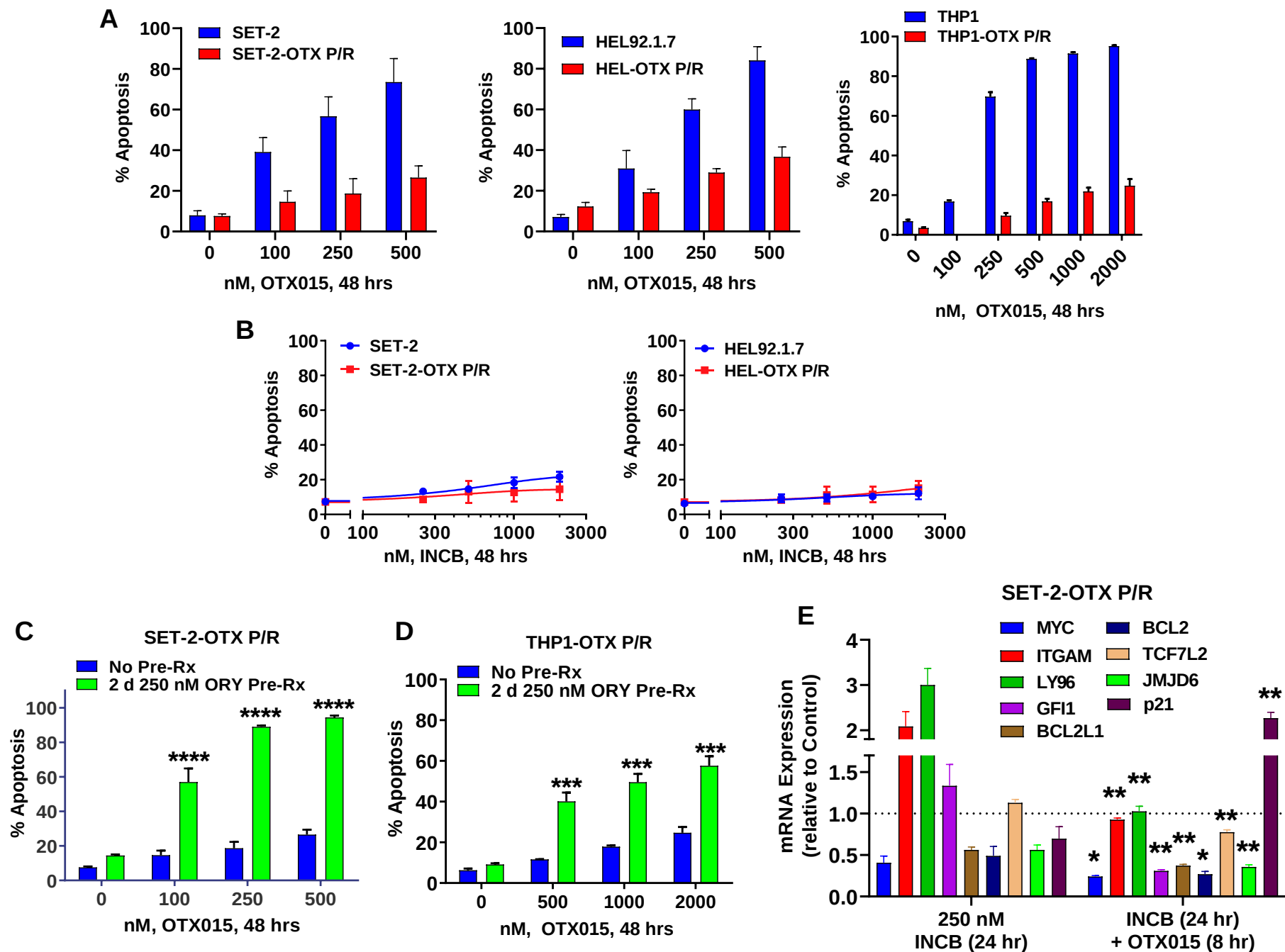


Figure S16

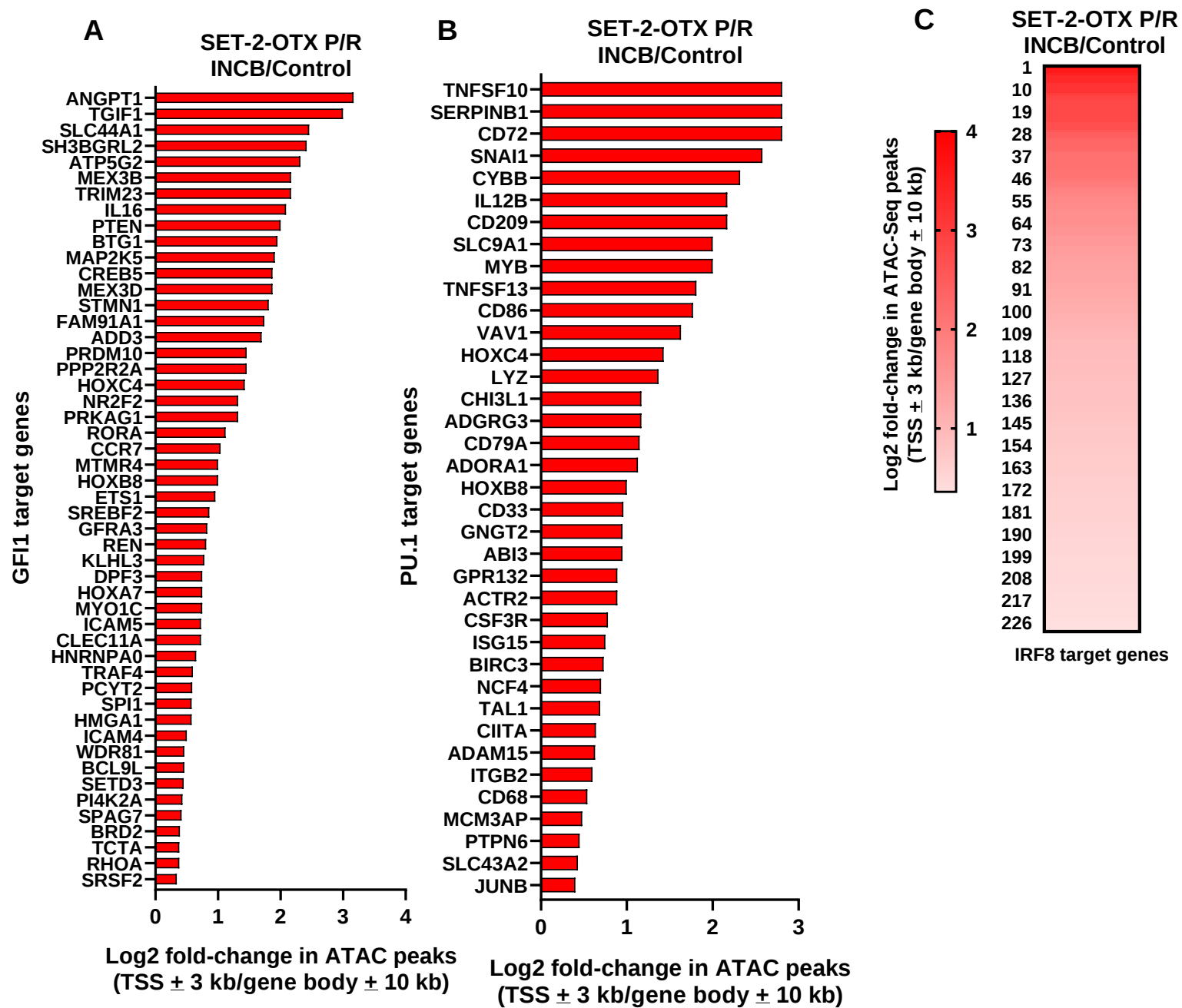


Figure S17

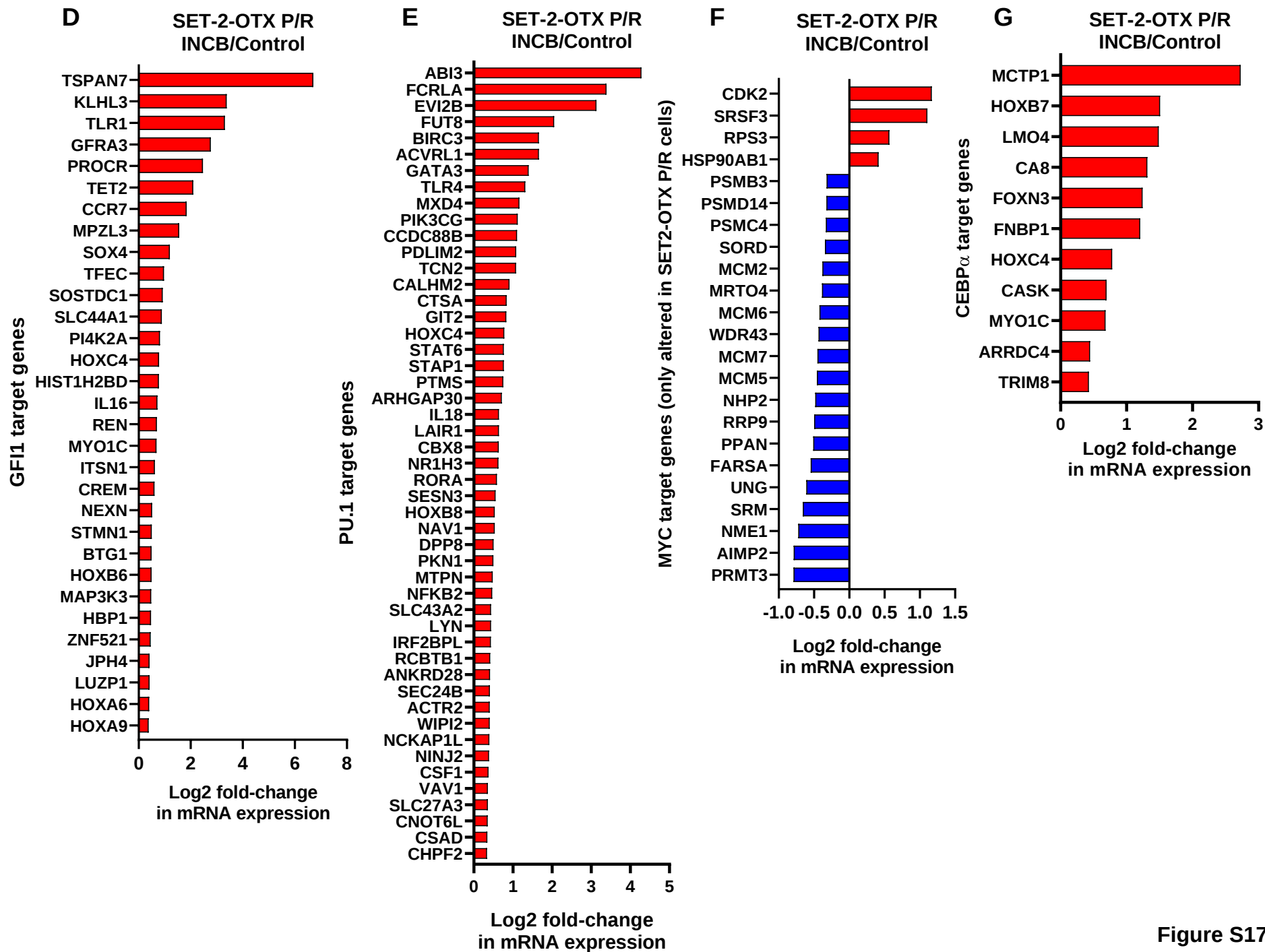


Figure S17

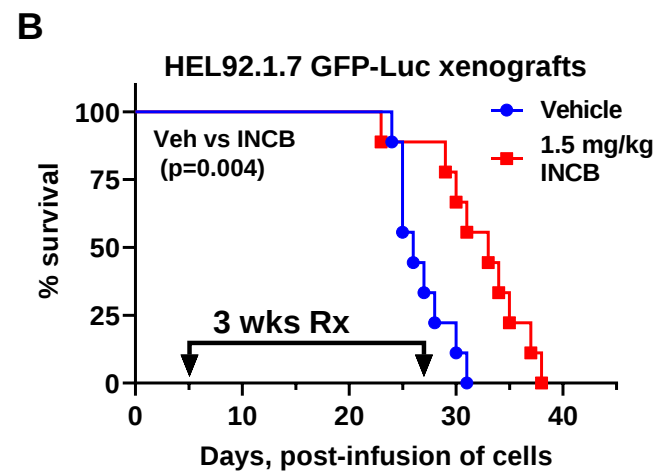
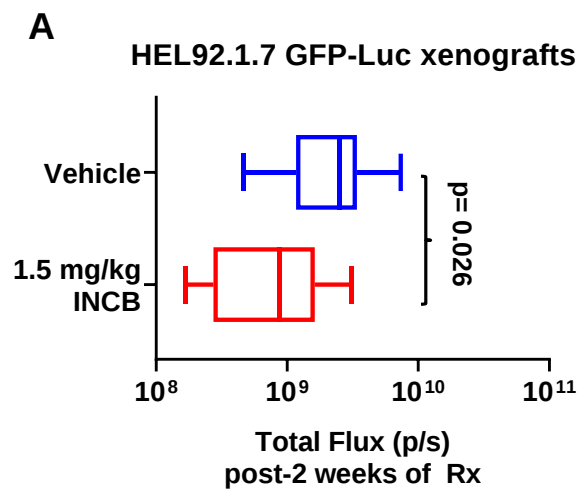


Figure S18