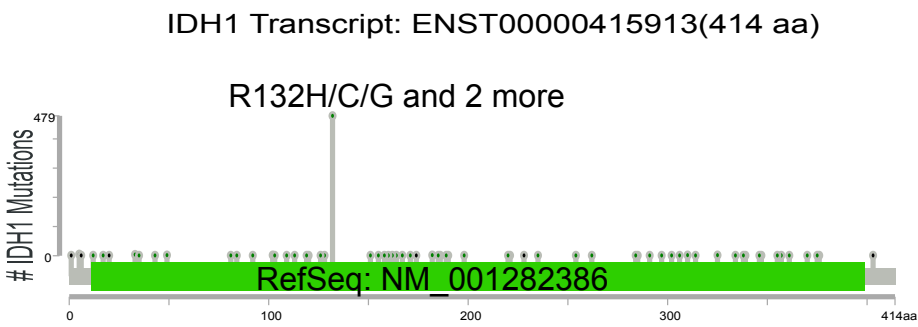
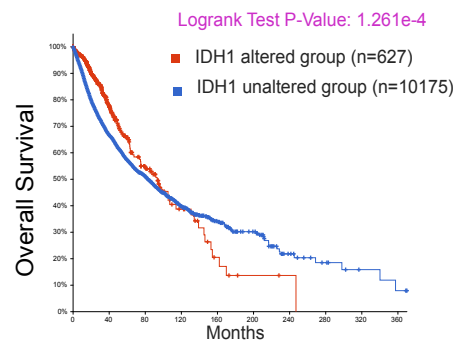


Figure S1

A



B



C

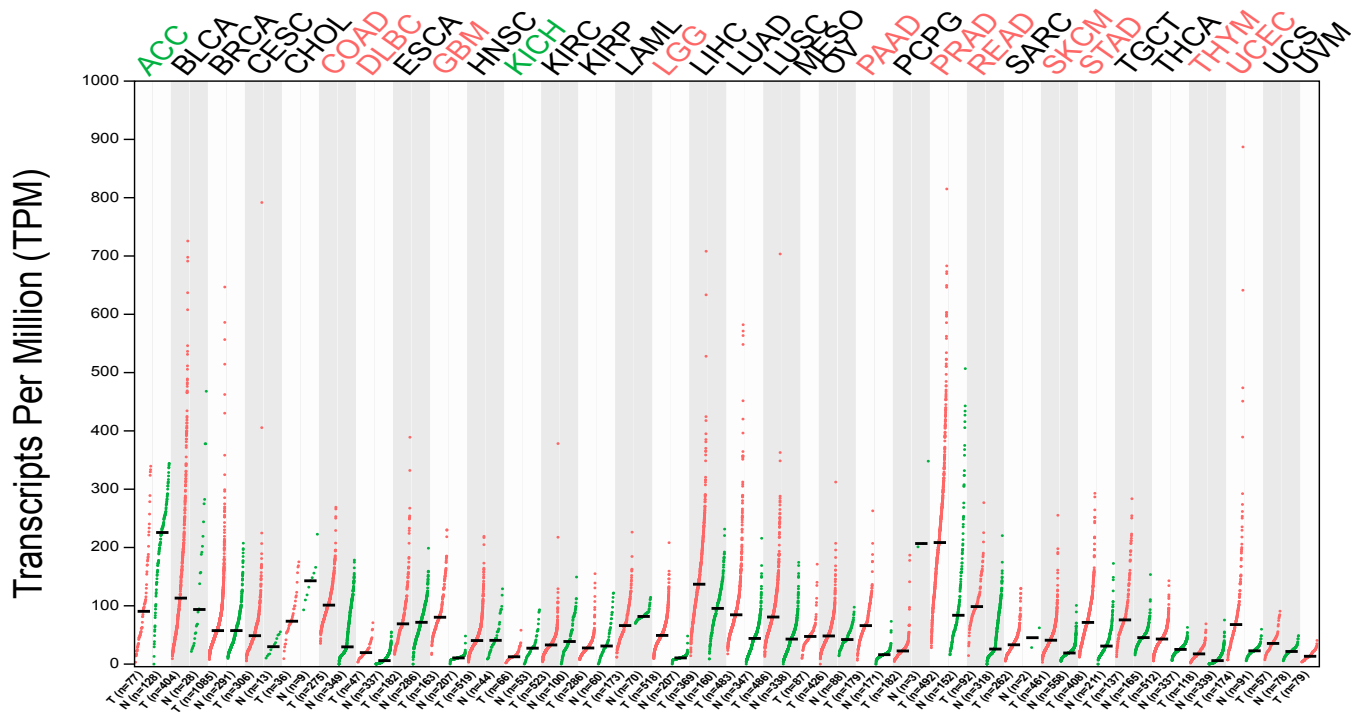
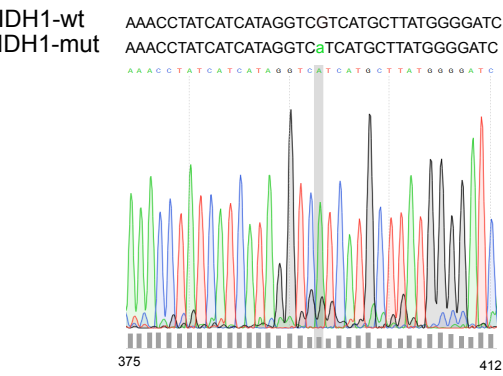
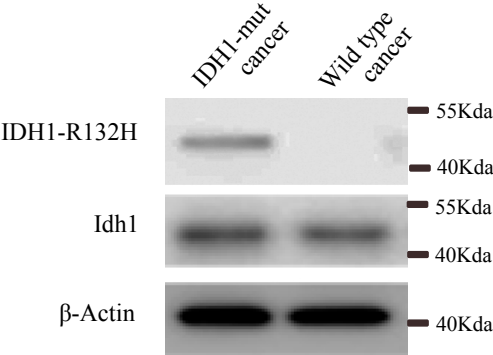


Figure S2

A



B



C

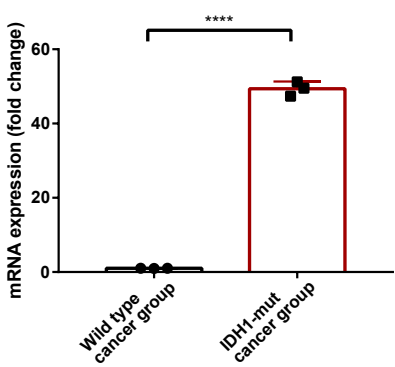


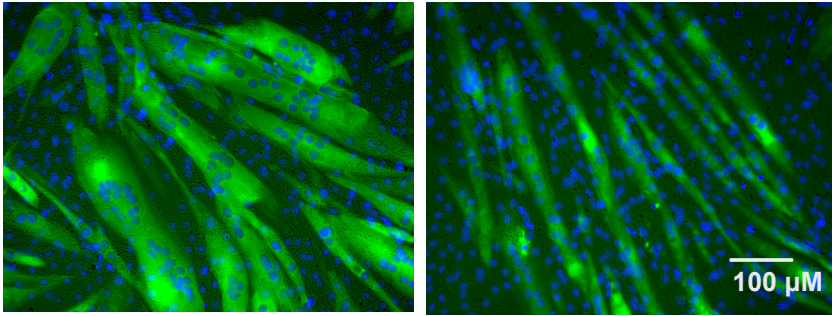
Figure S3

A

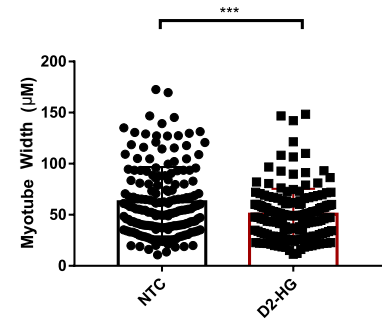
D-2-HG treated C2C12 myotube

-

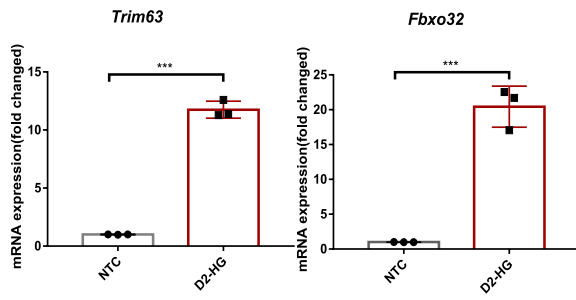
+



B



C



D

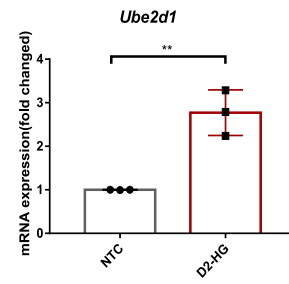


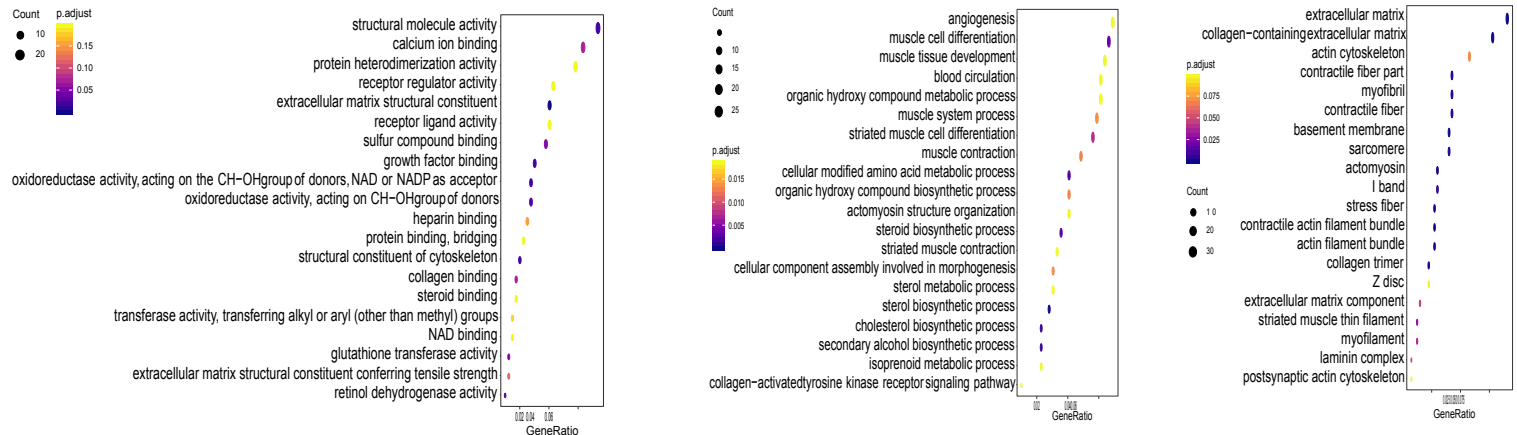
Figure S4

A D2HG - vs - NTC based on ORA- Enrichment

MF

BP

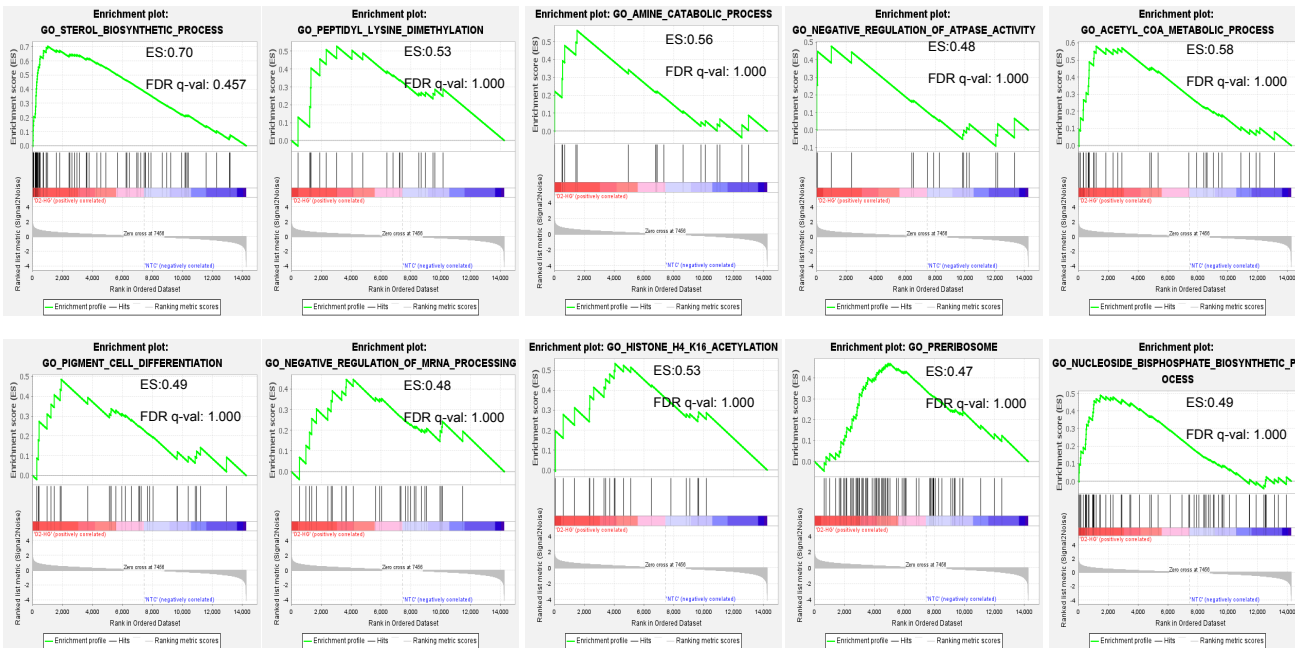
CC



B D2HG- vs- NTC based on GSEA

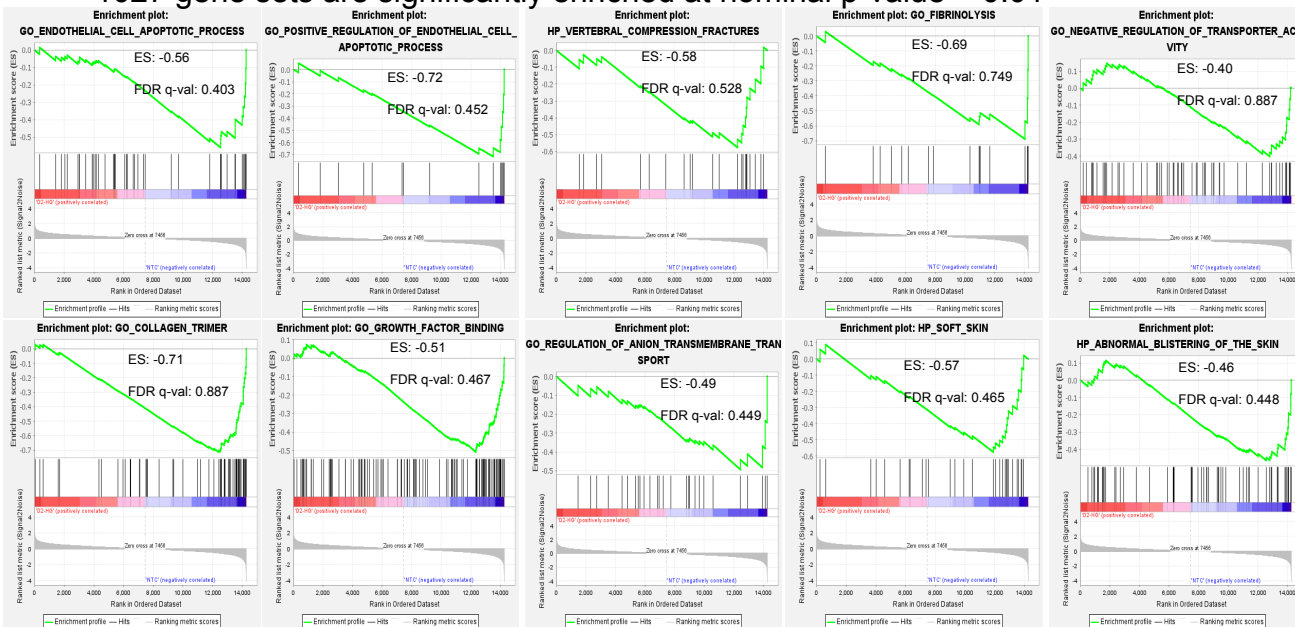
Enrichment in phenotype: D2-HG (3 samples)

322 gene sets are significantly enriched at nominal p-value < 0.01



C Enrichment in phenotype: NTC (3 samples)

1027 gene sets are significantly enriched at nominal p-value < 0.01



D Gene markers for D2HG-vs-NTC

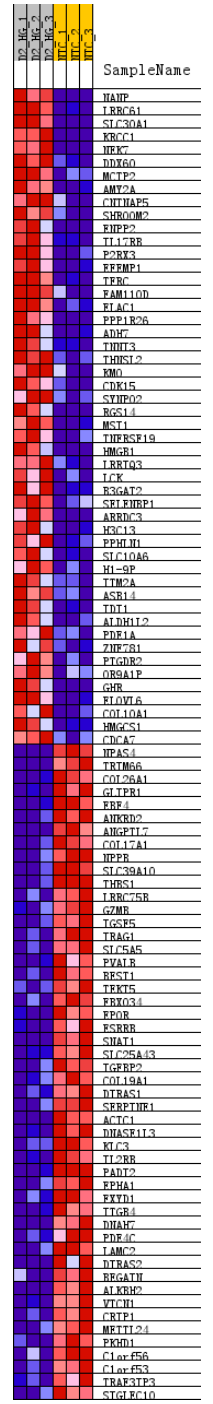
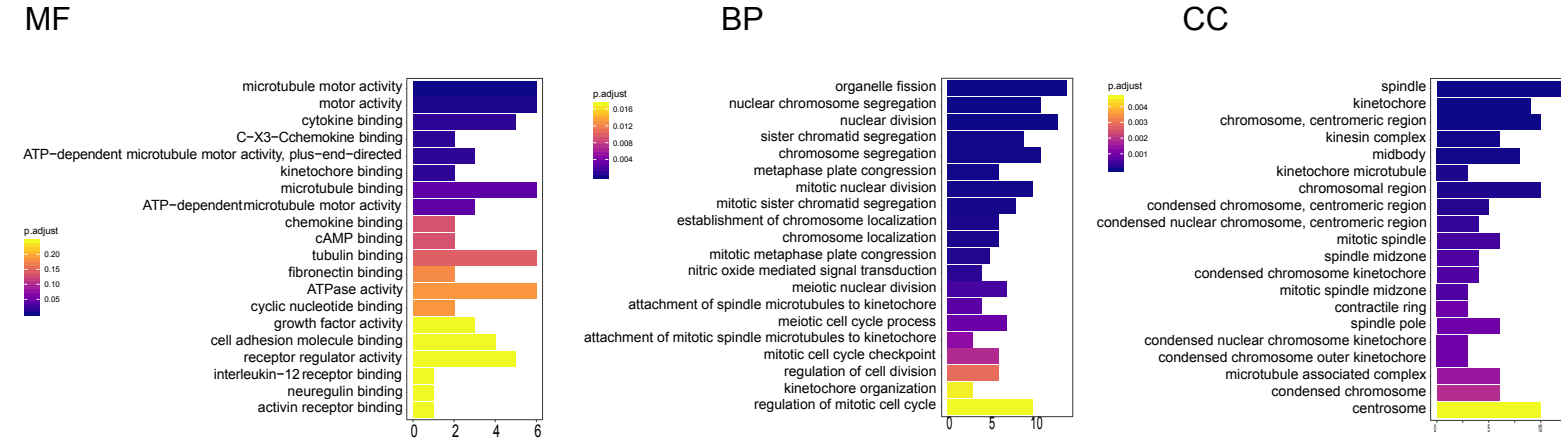
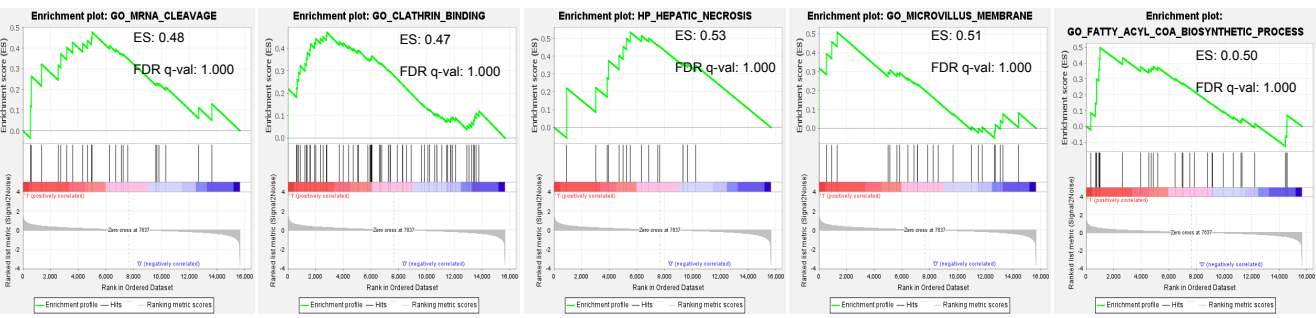


Figure S6

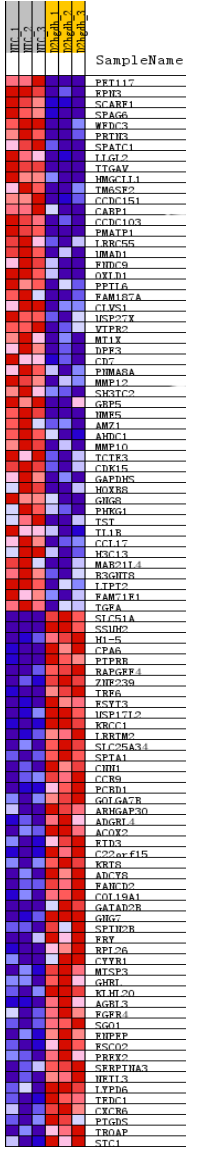
A D2hgdh - vs - NTC based on ORA- Enrichment



B Enrichment in phenotype: D2hgdh (3 samples)
224 gene sets are significantly enriched at nominal p-value < 0.01



D Gene markers for D2hgdh- NTC



C Enrichment in phenotype: NTC (3 samples)
646 gene sets are significantly enriched at nominal p-value < 0.01

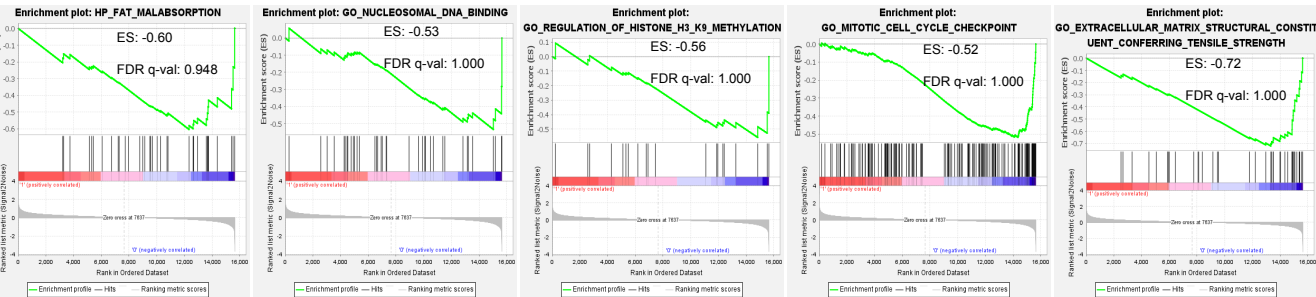


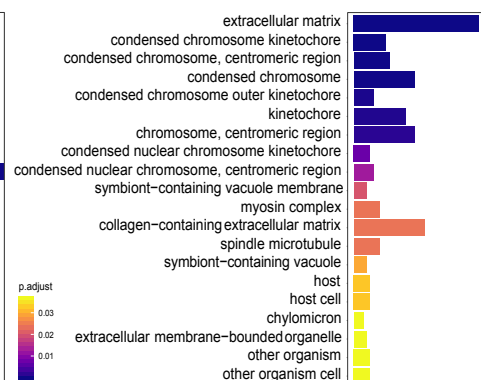
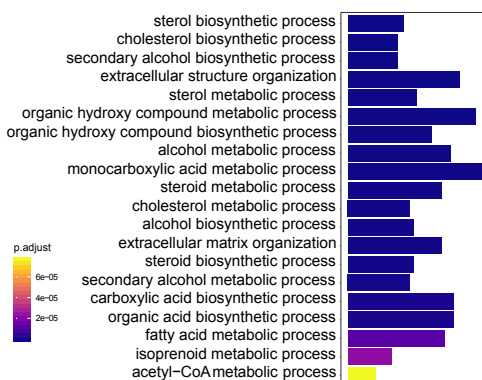
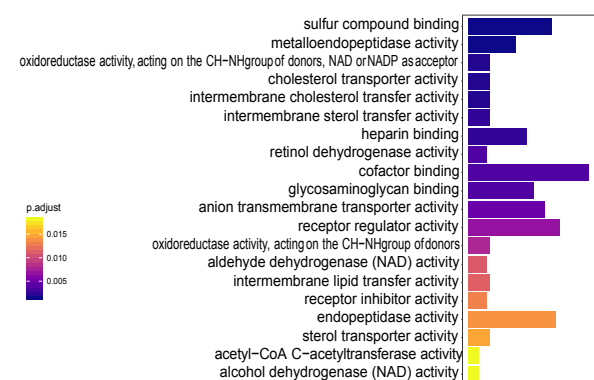
Figure S7

A D2HG +D2hgdh - vs - D2hgdh based on ORA- Enrichment

MF

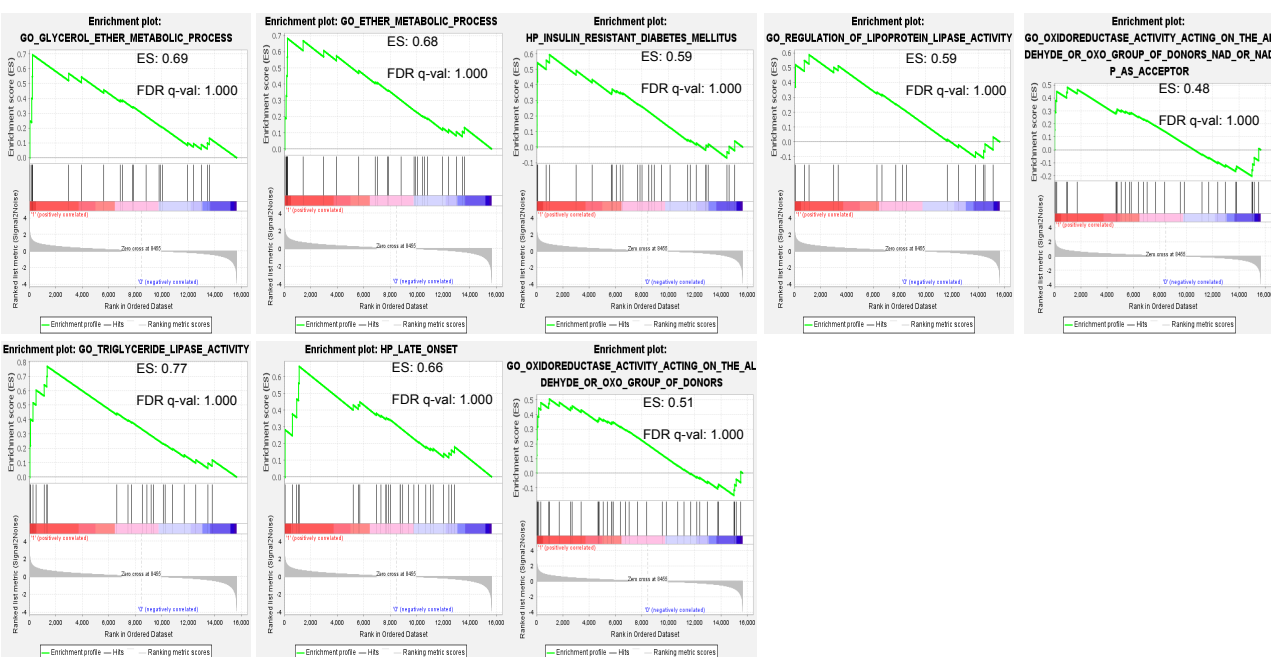
BP

CC

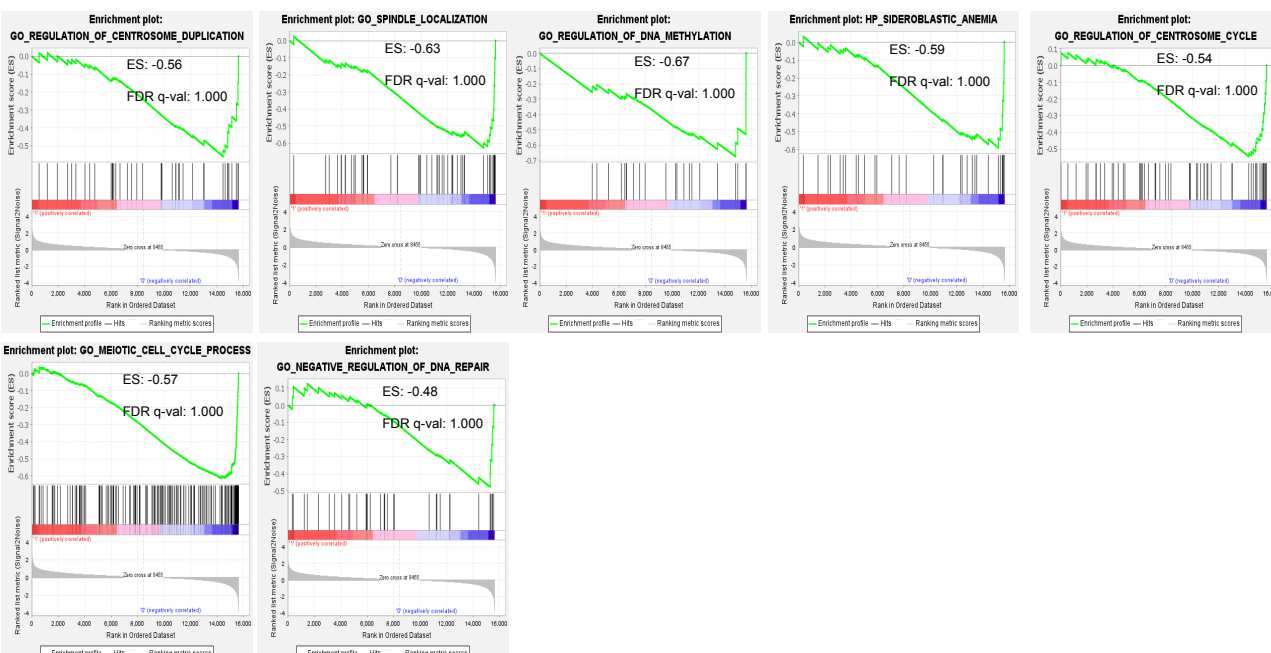


B D2HG +D2hgdh - vs - D2hgdh based on GSEA Enrichment in phenotype: D2HG +D2hgdh (3 samples)

476 gene sets are significantly enriched at nominal p-value < 0.01



C Enrichment in phenotype: D2hgdh (3 samples) 1081 gene sets are significantly enriched at nominal p-value < 0.01



D Gene markers for D2HG +D2hgdh - vs - D2hgdh

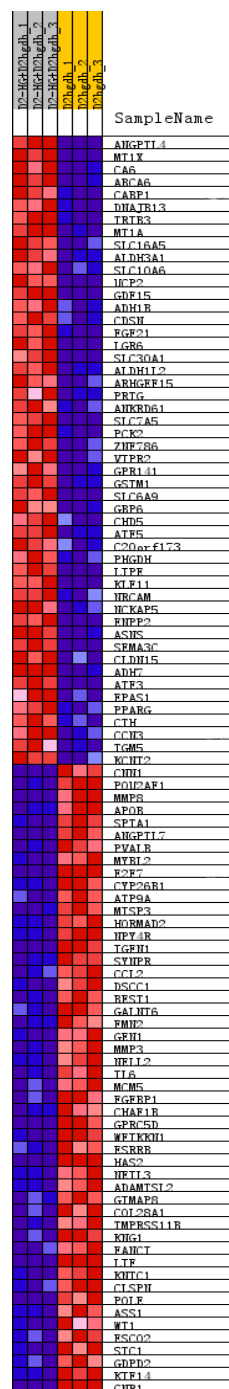


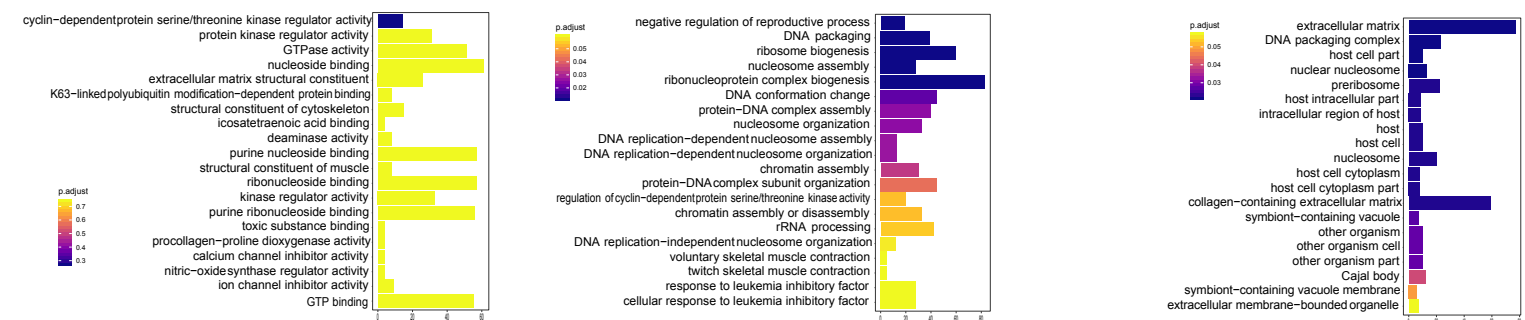
Figure S8

A D2HG +D2hgdh - vs - D2HG based on ORA- Enrichment

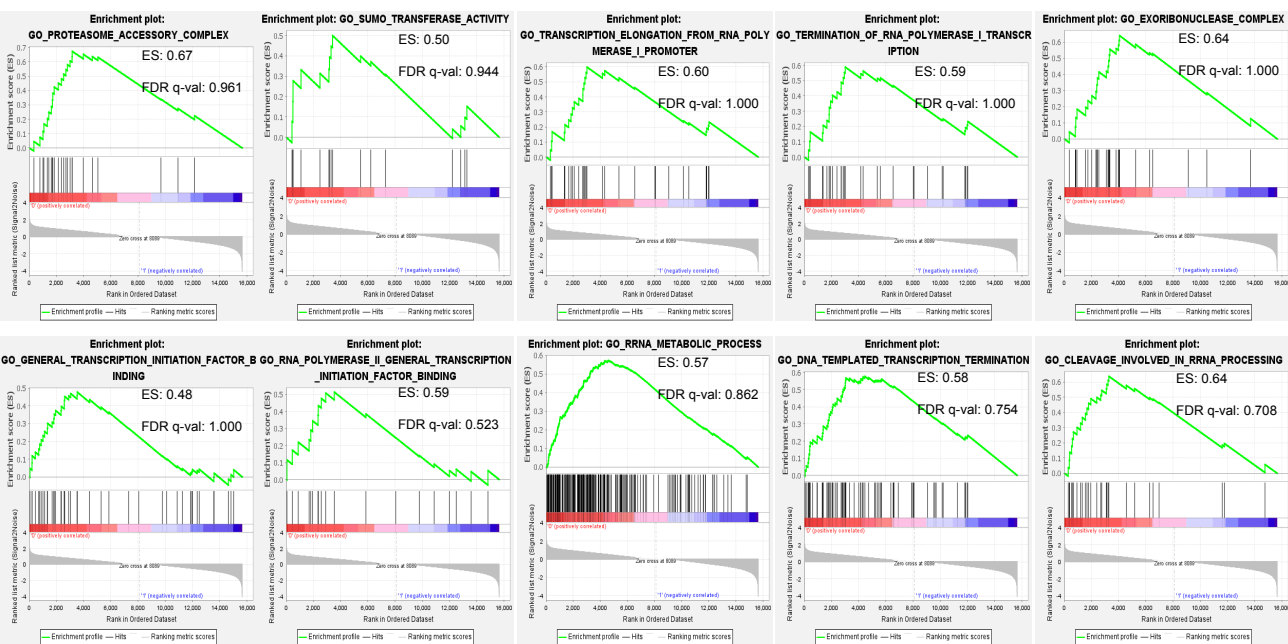
MF

BP

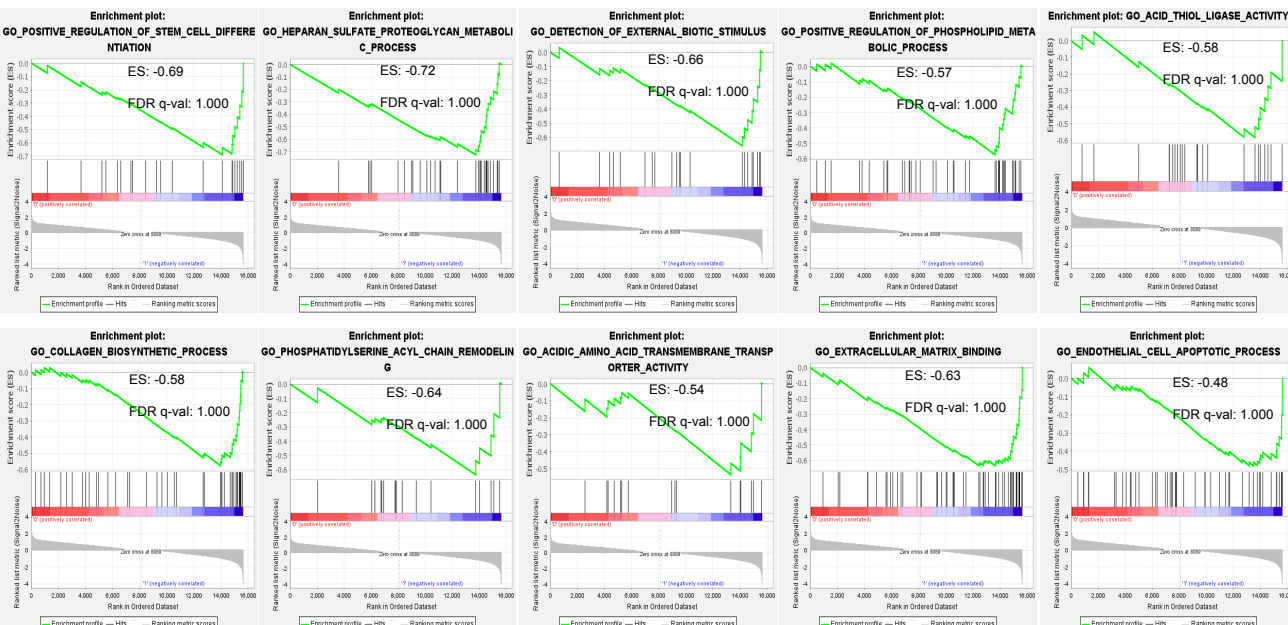
CC



B D2HG +D2hgdh - vs - D2HG based on GSEA Enrichment in phenotype: D2HG +D2hgdh (3 samples) 270 gene sets are significantly enriched at nominal p-value < 0.01



C Enrichment in phenotype: D2HG (3 samples) 1509 gene sets are significantly enriched at nominal p-value < 0.01



D Gene markers for D2HG +D2hgdh - vs - D2HG

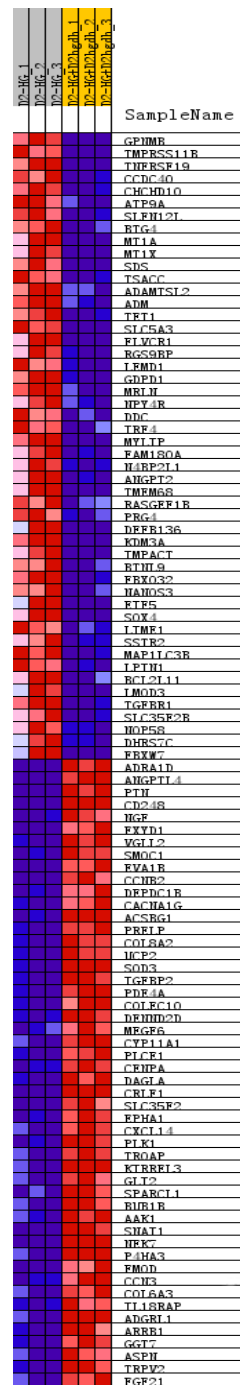


Figure S9

A

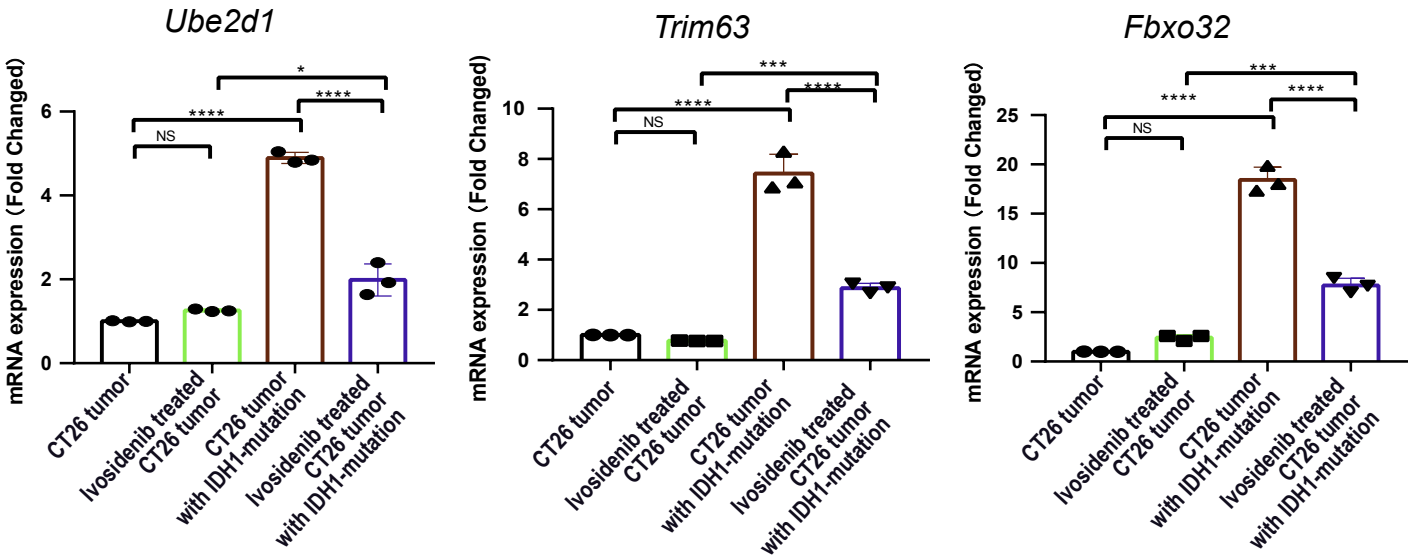
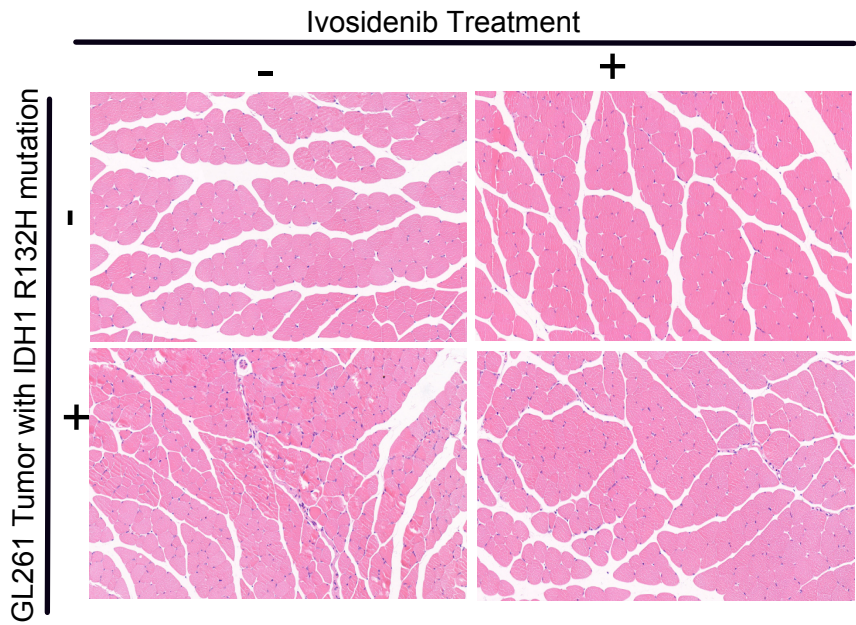
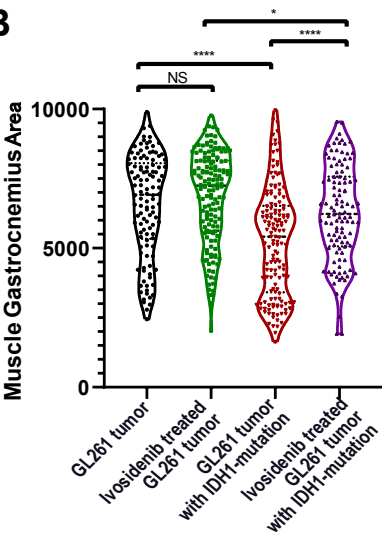


Figure S10

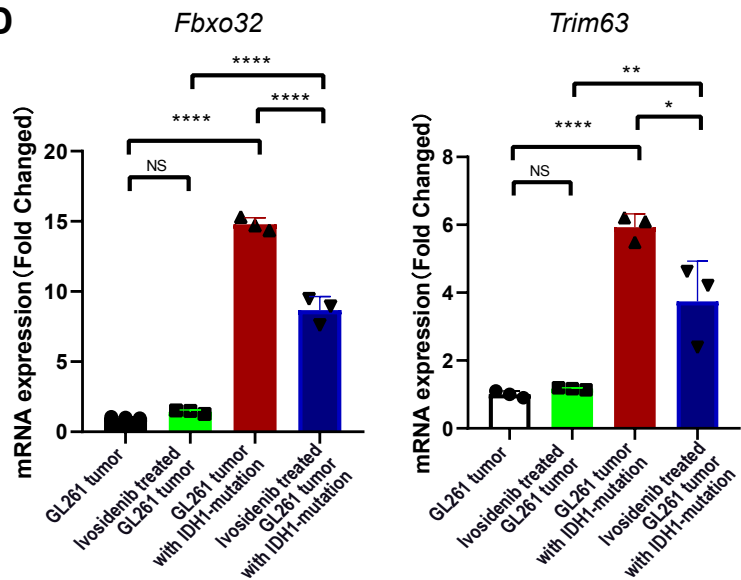
A



B



D



C

