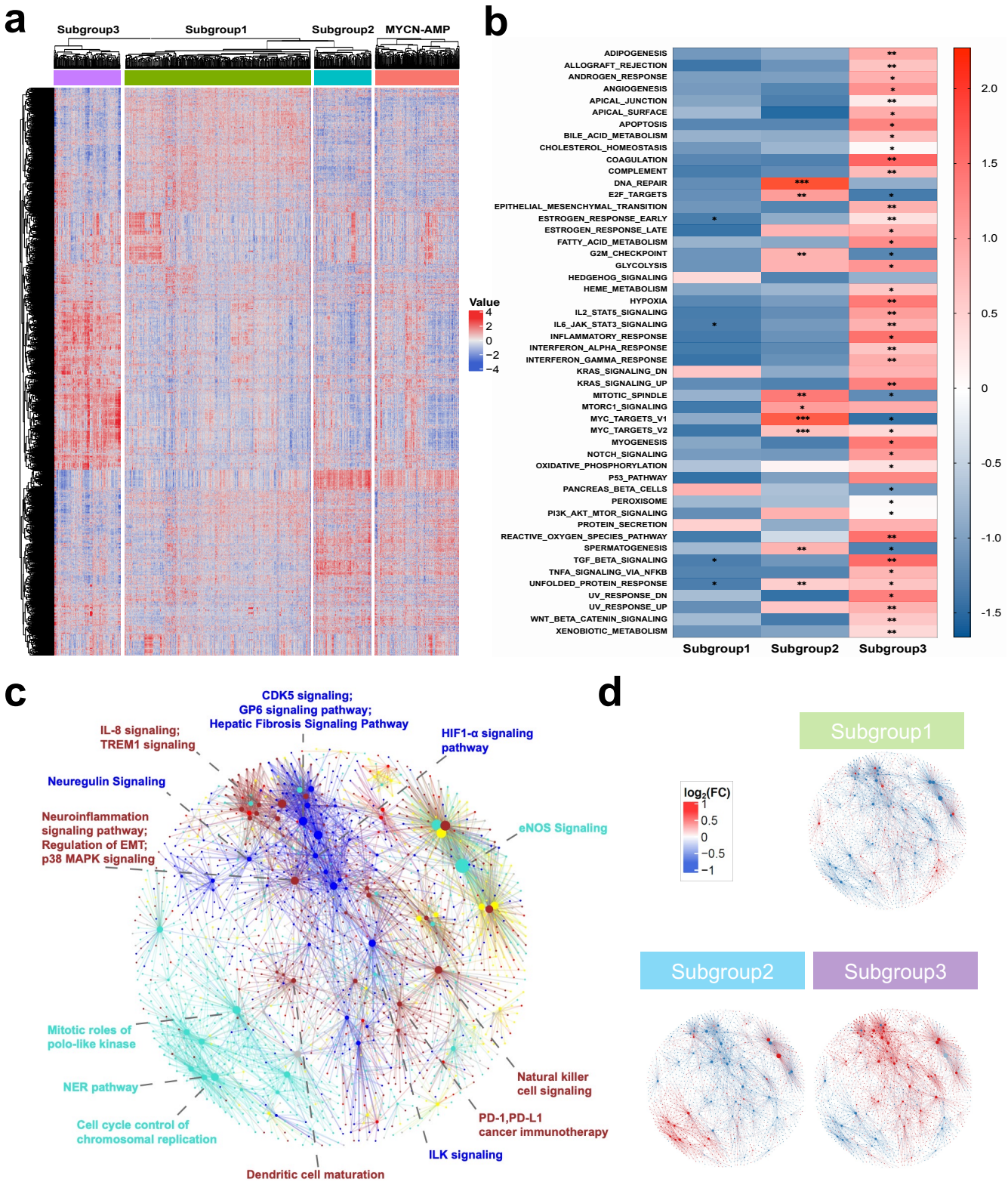
a
Subgroup3
Subgroup1
Subgroup2
MYCN-AMP
Value
4
2
0
−2
−4
b
ADIPOGENESIS
ALLOGRAFT_REJECTION
ANDROGEN_RESPONSE
ANGIOGENESIS
APICAL_JUNCTION
APICAL_SURFACE
APOPTOSIS
BILE_ACID_METABOLISM
CHOLESTEROL_HOMEOSTASIS
COAGULATION
COMPLEMENT
DNA_REPAIR
E2F_TARGETS
EPITHELIAL_MESENCHYMAL_TRANSITION
ESTROGEN_RESPONSE_EARLY
ESTROGEN_RESPONSE_LATE
FATTY_ACID_METABOLISM
G2M_CHECKPOINT
GLYCOLYSIS
HEDGEHOG_SIGNALING
HEME_METABOLISM
HYPOXIA
IL2_STAT5_SIGNALING
IL6_JAK_STAT3_SIGNALING
INFLAMMATORY_RESPONSE
INTERFERON_ALPHA_RESPONSE
INTERFERON_GAMMA_RESPONSE
KRAS_SIGNALING_DN
KRAS_SIGNALING_UP
MITOTIC_SPINDLE
MTORC1_SIGNALING
MYC_TARGETS_V1
MYC_TARGETS_V2
MYOGENESIS
NOTCH_SIGNALING
OXIDATIVE_PHOSPHORYLATION
P53_PATHWAY
PANCREAS_BETA_CELLS
PEROXISOME
PI3K_AKT_MTOR_SIGNALING
PROTEIN_SECRETION
REACTIVE_OXYGEN_SPECIES_PATHWAY
SPERMATOGENESIS
TGF_BETA_SIGNALING
TNFA_SIGNALING_VIA_NFKB
UNFOLDED_PROTEIN_RESPONSE
UV_RESPONSE_DN
UV_RESPONSE_UP
WNT_BETA_CATENIN_SIGNALING
XENOBIOTIC_METABOLISM
Subgroup1
Subgroup2
Subgroup3
2.0
1.5
1.0
0.5
0
-0.5
-1.0
-1.5
c
CDK5 signaling;
GP6 signaling pathway;
Hepatic Fibrosis Signaling Pathway
IL-8 signaling;
TREM1 signaling
HIF1-α signaling
pathway
Neuregulin Signaling
Neuroinflammation
signaling pathway;
Regulation of EMT;
p38 MAPK signaling
eNOS Signaling
Mitotic roles of
polo-like kinase
NER pathway
Cell cycle control of
chromosomal replication
Natural killer
cell signaling
PD-1,PD-L1
cancer immunotherapy
ILK signaling
Dendritic cell maturation
d
log2(FC)
1
0.5
0
−0.5
−1
Subgroup1
Subgroup2
Subgroup3