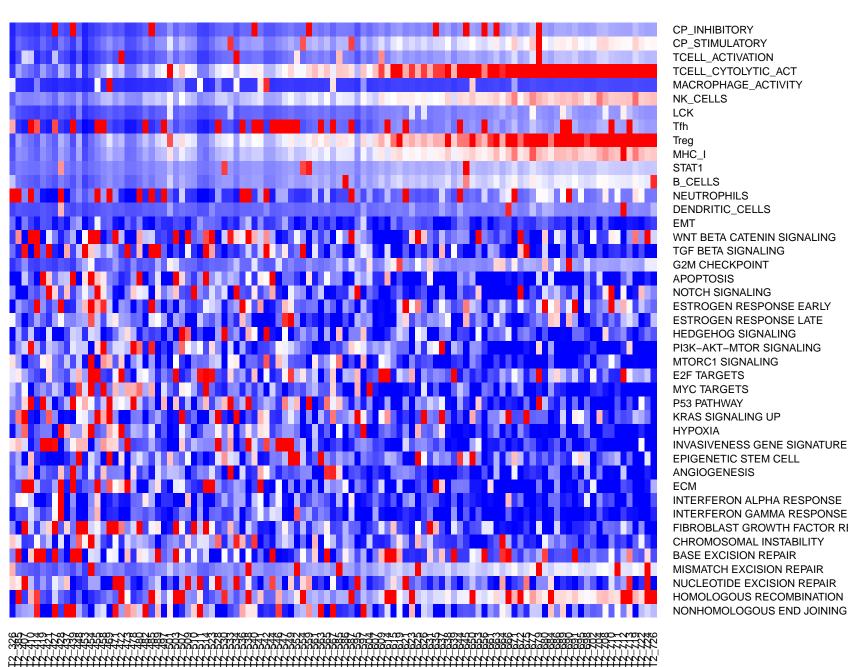
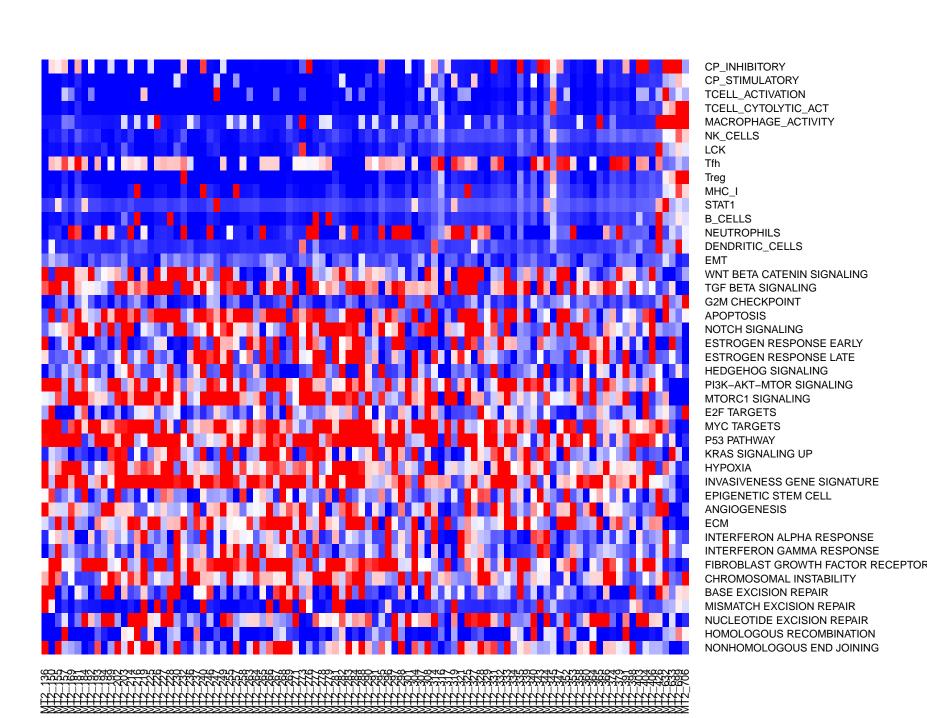


Gene-set enrichment within the cluster 0 (TU2)

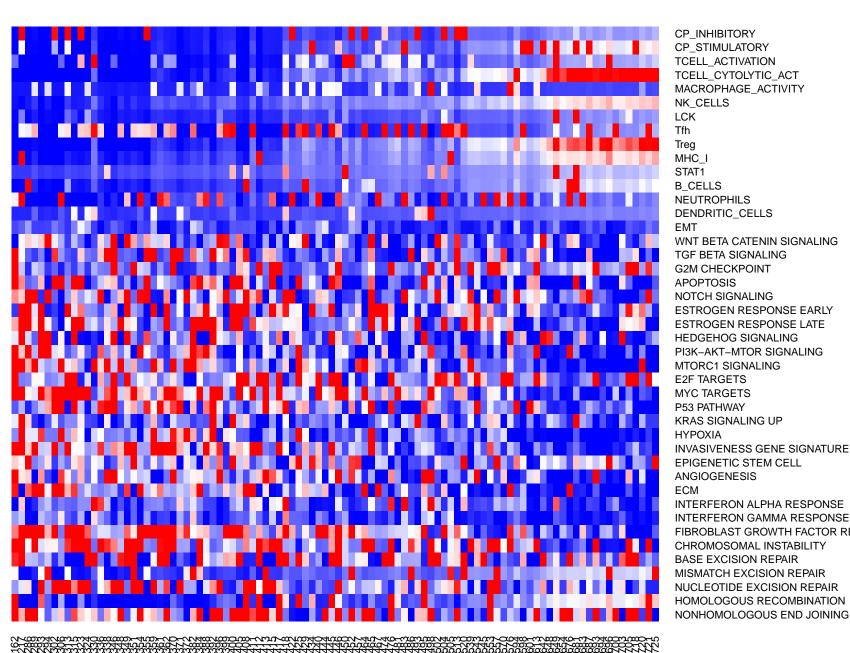


CP_INHIBITORY CP_STIMULATORY TCELL_ACTIVATION TCELL_CYTOLYTIC_ACT MACROPHAGE_ACTIVITY NEUTROPHILS DENDRITIC_CELLS WNT BETA CATENIN SIGNALING TGF BETA SIGNALING **G2M CHECKPOINT** NOTCH SIGNALING **ESTROGEN RESPONSE EARLY ESTROGEN RESPONSE LATE** HEDGEHOG SIGNALING PI3K-AKT-MTOR SIGNALING MTORC1 SIGNALING MYC TARGETS KRAS SIGNALING UP INVASIVENESS GENE SIGNATURE **EPIGENETIC STEM CELL ANGIOGENESIS** INTERFERON ALPHA RESPONSE INTERFERON GAMMA RESPONSE FIBROBLAST GROWTH FACTOR RECEPTOR CHROMOSOMAL INSTABILITY BASE EXCISION REPAIR MISMATCH EXCISION REPAIR

Gene-set enrichment within the cluster 1 (TU2)

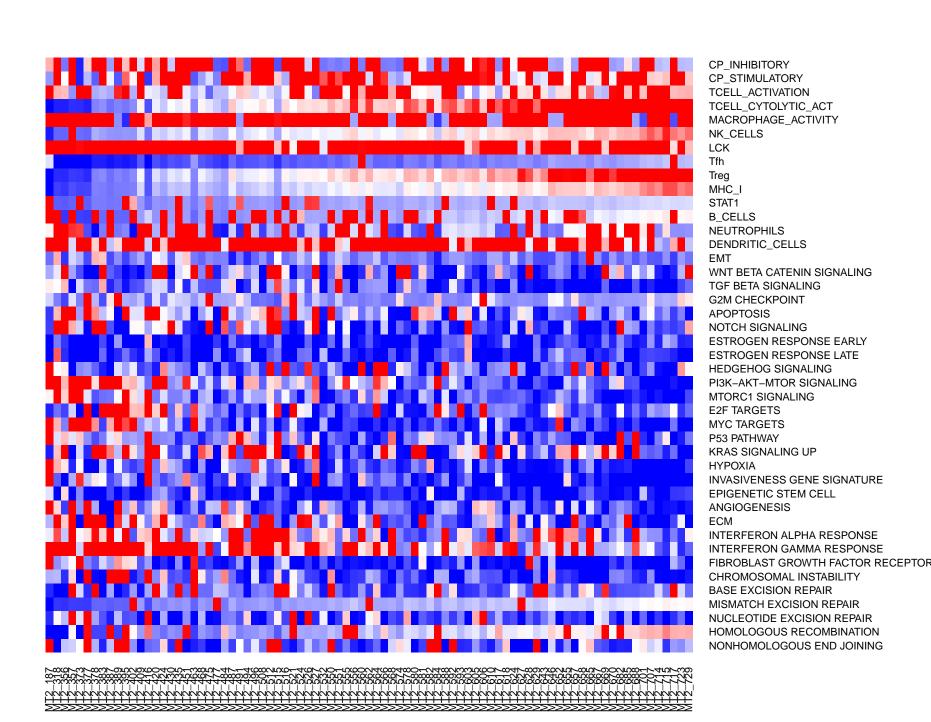


Gene-set enrichment within the cluster 2 (TU2)

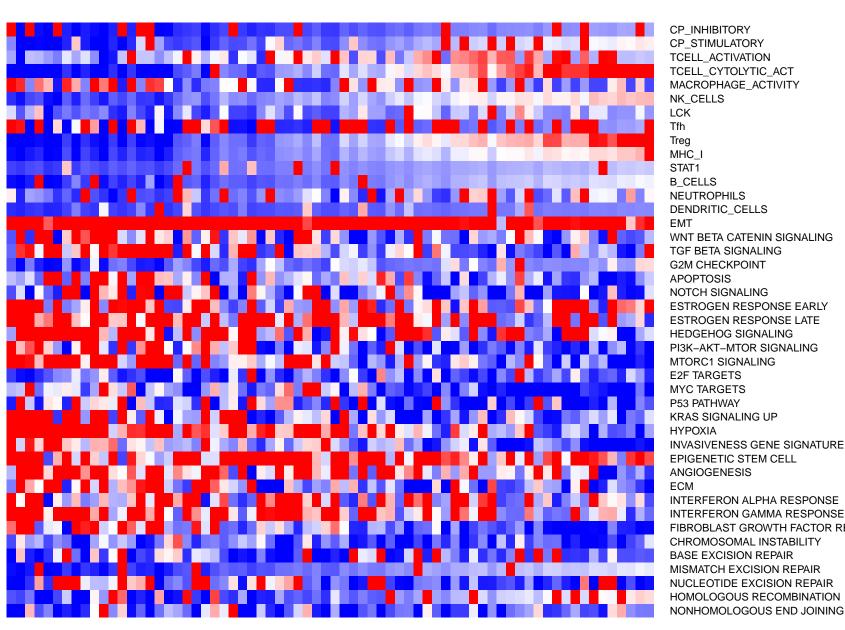


CP_INHIBITORY CP_STIMULATORY TCELL_ACTIVATION TCELL_CYTOLYTIC_ACT MACROPHAGE_ACTIVITY NK_CELLS MHC_I STAT1 **B_CELLS NEUTROPHILS** DENDRITIC_CELLS WNT BETA CATENIN SIGNALING TGF BETA SIGNALING **G2M CHECKPOINT APOPTOSIS** NOTCH SIGNALING **ESTROGEN RESPONSE EARLY ESTROGEN RESPONSE LATE** HEDGEHOG SIGNALING PI3K-AKT-MTOR SIGNALING MTORC1 SIGNALING E2F TARGETS MYC TARGETS P53 PATHWAY KRAS SIGNALING UP **HYPOXIA** INVASIVENESS GENE SIGNATURE **EPIGENETIC STEM CELL ANGIOGENESIS** INTERFERON ALPHA RESPONSE INTERFERON GAMMA RESPONSE FIBROBLAST GROWTH FACTOR RECEPTOR CHROMOSOMAL INSTABILITY BASE EXCISION REPAIR MISMATCH EXCISION REPAIR NUCLEOTIDE EXCISION REPAIR

Gene-set enrichment within the cluster 3 (TU2)

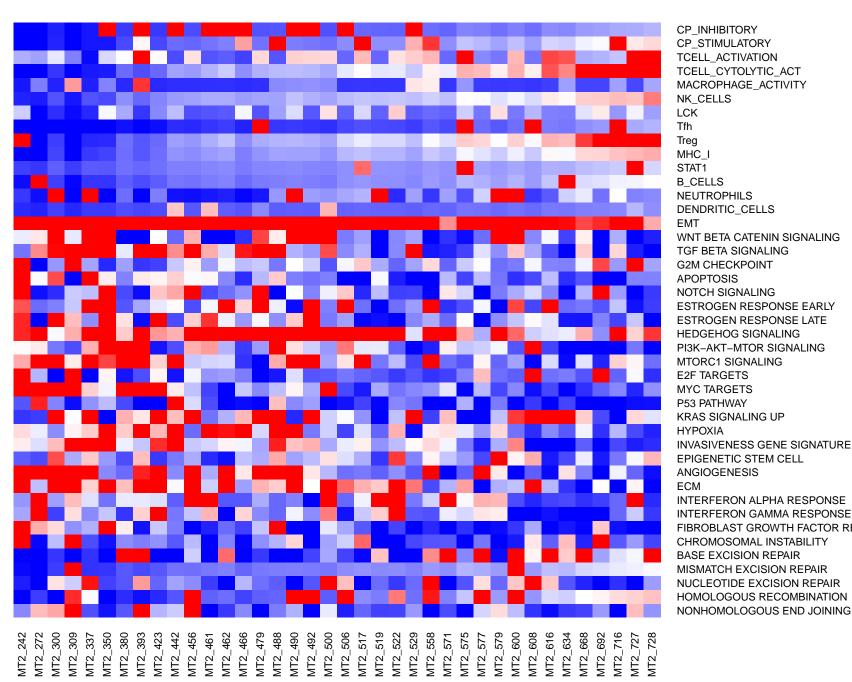


Gene-set enrichment within the cluster 4 (TU2)



TCELL_ACTIVATION TCELL_CYTOLYTIC_ACT MACROPHAGE_ACTIVITY NK_CELLS LCK Tfh Treg MHC_I STAT1 **B_CELLS NEUTROPHILS** DENDRITIC_CELLS WNT BETA CATENIN SIGNALING TGF BETA SIGNALING **G2M CHECKPOINT APOPTOSIS** NOTCH SIGNALING **ESTROGEN RESPONSE EARLY ESTROGEN RESPONSE LATE** HEDGEHOG SIGNALING PI3K-AKT-MTOR SIGNALING MTORC1 SIGNALING E2F TARGETS MYC TARGETS P53 PATHWAY KRAS SIGNALING UP **HYPOXIA** INVASIVENESS GENE SIGNATURE **EPIGENETIC STEM CELL ANGIOGENESIS** ECM INTERFERON ALPHA RESPONSE INTERFERON GAMMA RESPONSE FIBROBLAST GROWTH FACTOR RECEPTOR CHROMOSOMAL INSTABILITY BASE EXCISION REPAIR MISMATCH EXCISION REPAIR NUCLEOTIDE EXCISION REPAIR

Gene-set enrichment within the cluster 5 (TU2)



TCELL_ACTIVATION TCELL_CYTOLYTIC_ACT MACROPHAGE_ACTIVITY DENDRITIC_CELLS WNT BETA CATENIN SIGNALING TGF BETA SIGNALING **G2M CHECKPOINT** NOTCH SIGNALING **ESTROGEN RESPONSE EARLY** ESTROGEN RESPONSE LATE **HEDGEHOG SIGNALING** PI3K-AKT-MTOR SIGNALING MTORC1 SIGNALING KRAS SIGNALING UP INVASIVENESS GENE SIGNATURE **EPIGENETIC STEM CELL** INTERFERON ALPHA RESPONSE INTERFERON GAMMA RESPONSE FIBROBLAST GROWTH FACTOR RECEPTOR CHROMOSOMAL INSTABILITY BASE EXCISION REPAIR MISMATCH EXCISION REPAIR

Gene-set enrichment within the cluster 6 (TU2)

