

<b>Top 15 Pathways Human (No of genes mapped out of 3959)</b>
hsa01100 Metabolic pathways - Homo sapiens (human) (399)
hsa05200 Pathways in cancer - Homo sapiens (human) (119)
hsa04151 PI3K-Akt signaling pathway - Homo sapiens (human) (92)
hsa04141 Protein processing in endoplasmic reticulum - Homo sapiens (human) (73)
hsa05205 Proteoglycans in cancer - Homo sapiens (human) (67)
hsa04014 Ras signaling pathway - Homo sapiens (human) (67)
hsa04510 Focal adhesion - Homo sapiens (human) (65)
hsa04144 Endocytosis - Homo sapiens (human) (64)
hsa04015 Rap1 signaling pathway - Homo sapiens (human) (62)
hsa05166 HTLV-I infection - Homo sapiens (human) (62)
hsa04024 cAMP signaling pathway - Homo sapiens (human) (61)
hsa04810 Regulation of actin cytoskeleton - Homo sapiens (human) (59)
hsa04080 Neuroactive ligand-receptor interaction - Homo sapiens (human) (59)
hsa04010 MAPK signaling pathway - Homo sapiens (human) (58)
hsa04020 Calcium signaling pathway - Homo sapiens (human) (55)

**Table 1 - Top 15 Pathways for the Human differentially expressed genes**

<b>Top 15 Pathways Cell Line (No of genes mapped out of 2611)</b>
hsa01100 Metabolic pathways - Homo sapiens (human) (196)
hsa05200 Pathways in cancer - Homo sapiens (human) (88)
hsa03010 Ribosome - Homo sapiens (human) (77)
hsa04151 PI3K-Akt signaling pathway - Homo sapiens (human) (65)
hsa05016 Huntington's disease - Homo sapiens (human) (56)
hsa05166 HTLV-I infection - Homo sapiens (human) (49)
hsa04810 Regulation of actin cytoskeleton - Homo sapiens (human) (48)
hsa04510 Focal adhesion - Homo sapiens (human) (47)
hsa04014 Ras signaling pathway - Homo sapiens (human) (46)
hsa05010 Alzheimer's disease - Homo sapiens (human) (45)
hsa04015 Rap1 signaling pathway - Homo sapiens (human) (44)
hsa04932 Non-alcoholic fatty liver disease (NAFLD) - Homo sapiens (human) (42)
hsa04010 MAPK signaling pathway - Homo sapiens (human) (42)
hsa00190 Oxidative phosphorylation - Homo sapiens (human) (40)
hsa05012 Parkinson's disease - Homo sapiens (human) (40)

**Table 2 - Top 15 Pathways for the Cell line differentially expressed genes**

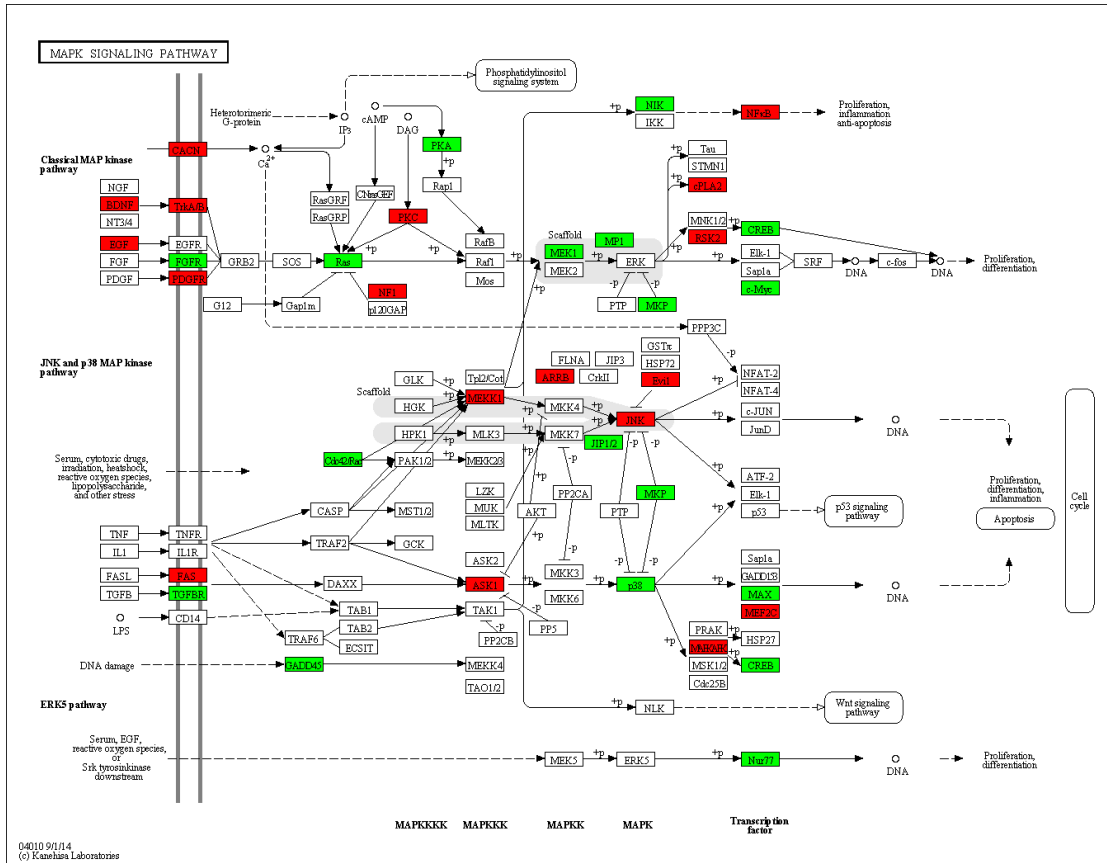


Figure 1 - Differentially expressed cell line genes overlaid on KEGG hsa04010 MAPK signaling pathway

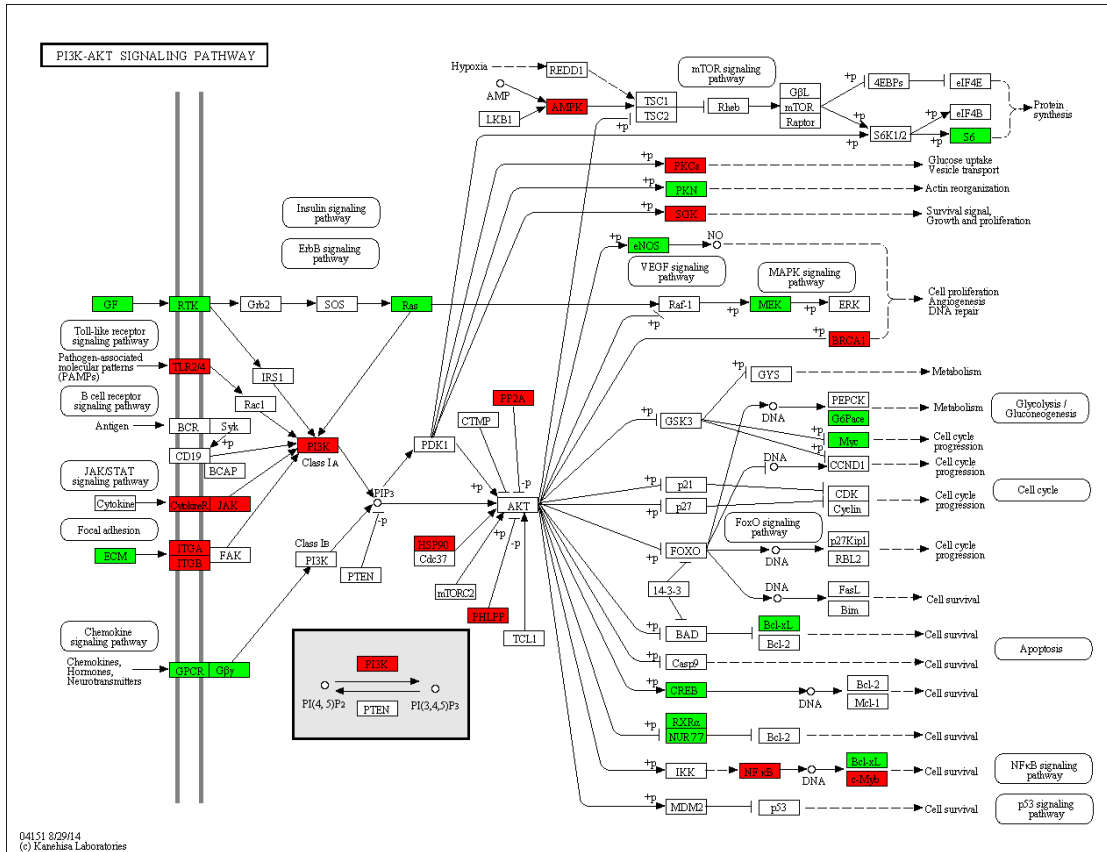
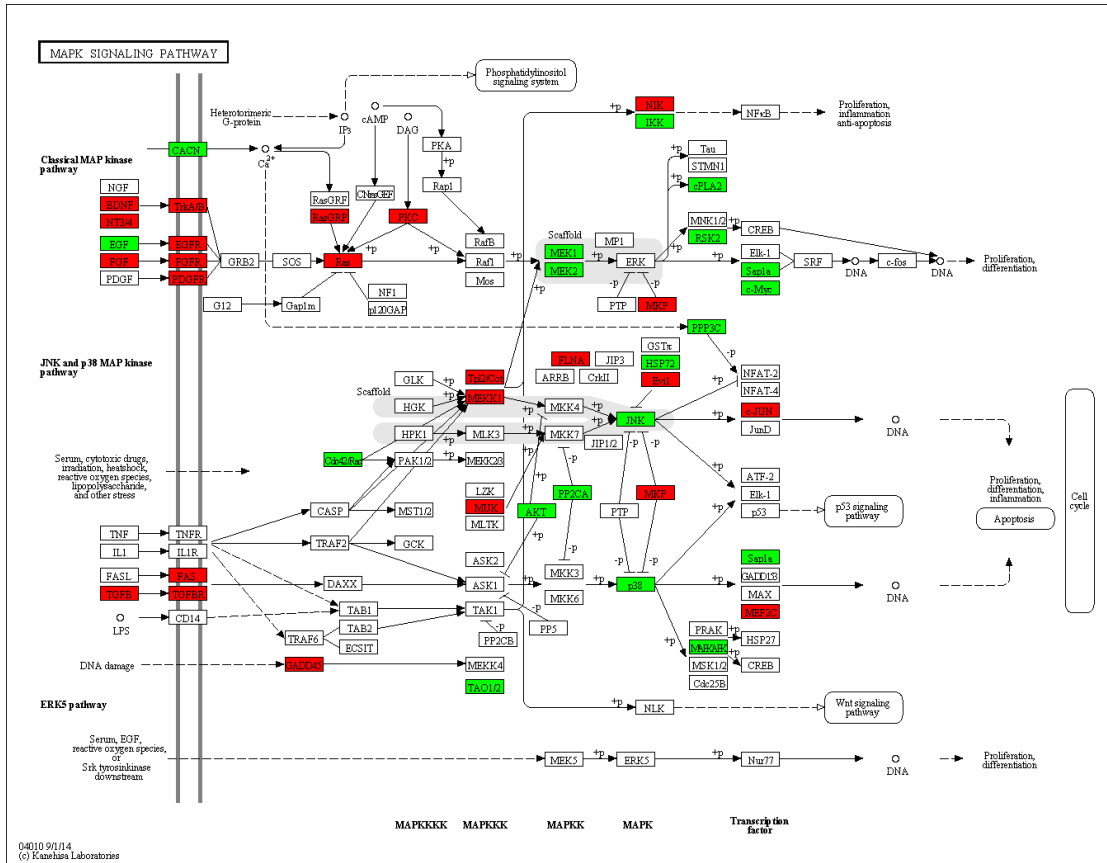
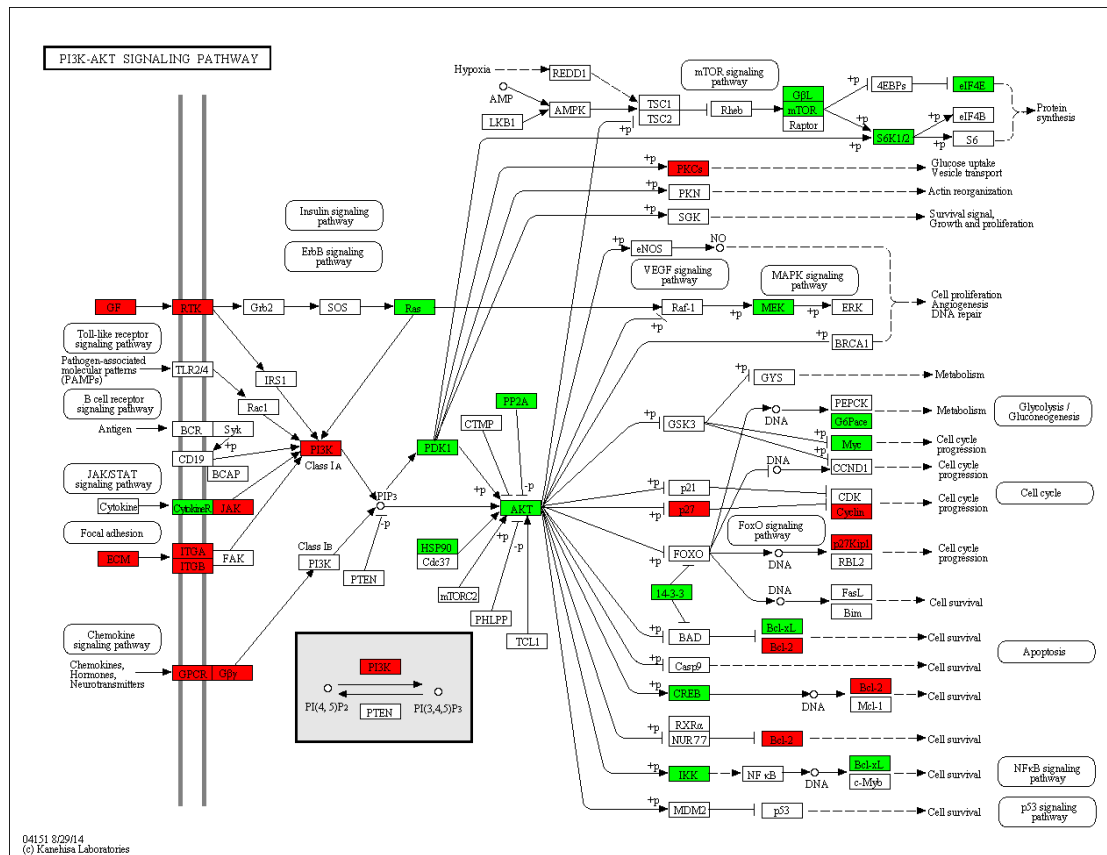


Figure 2 - Differentially expressed cell line genes overlaid on KEGG hsa04151 PI3K-Akt signaling pathway - Homo sapiens (human)



**Figure 3 – Differentially expressed human tumour genes overlaid on KEGG hsa04010 MAPK signaling pathway**



**Figure 4 - Differentially expressed human tumour genes overlaid on KEGG hsa04151 PI3K-Akt signaling pathway - Homo sapiens (human)**