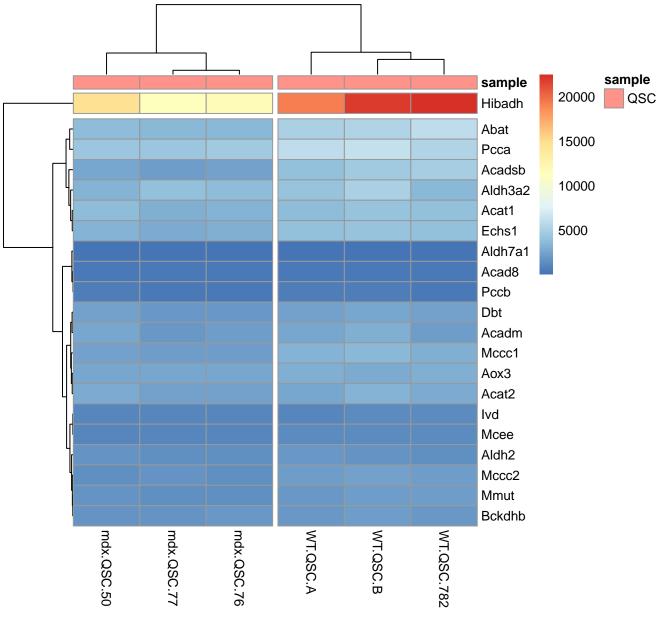
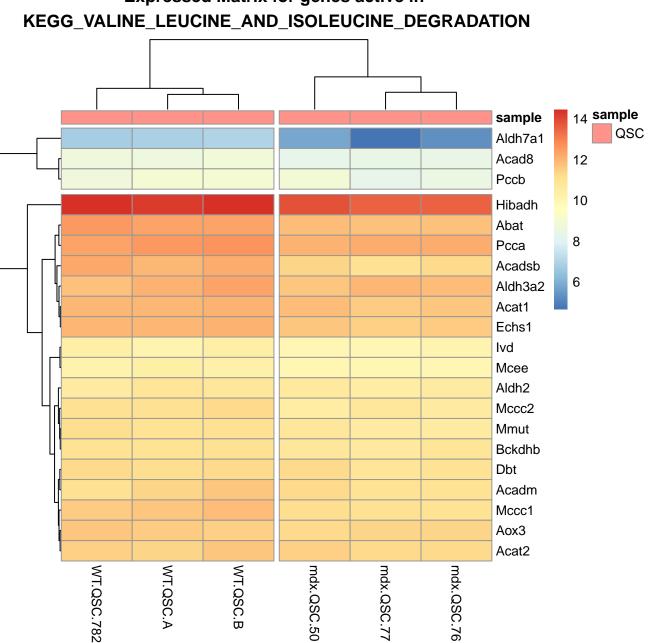
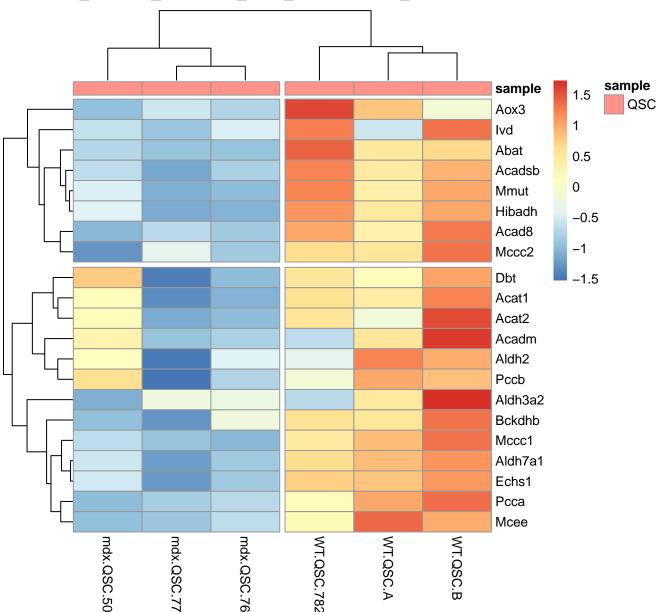
Expressed Matrix from Normalized for genes in KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION



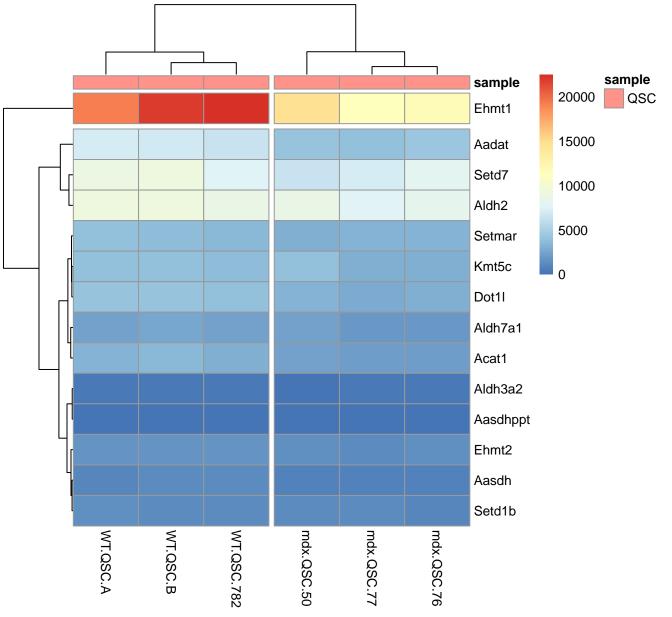
Expressed Matrix for genes active in



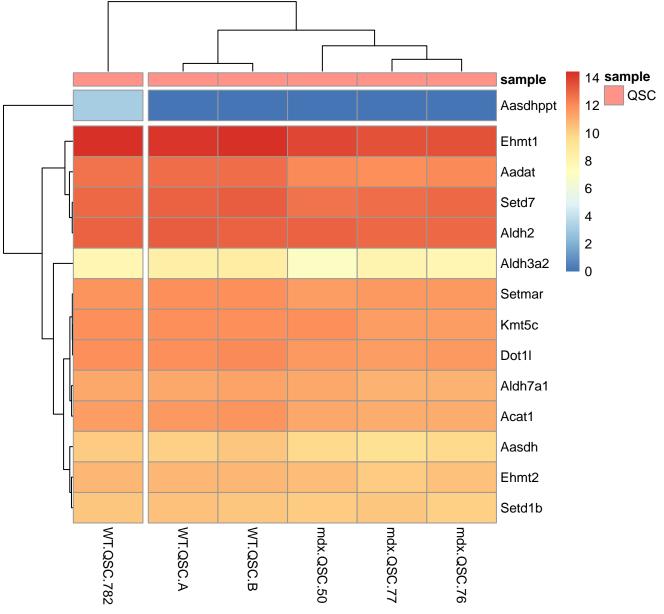
Scalling expressed matrix for genes active in KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION



Expressed Matrix from Normalized for genes in KEGG_LYSINE_DEGRADATION

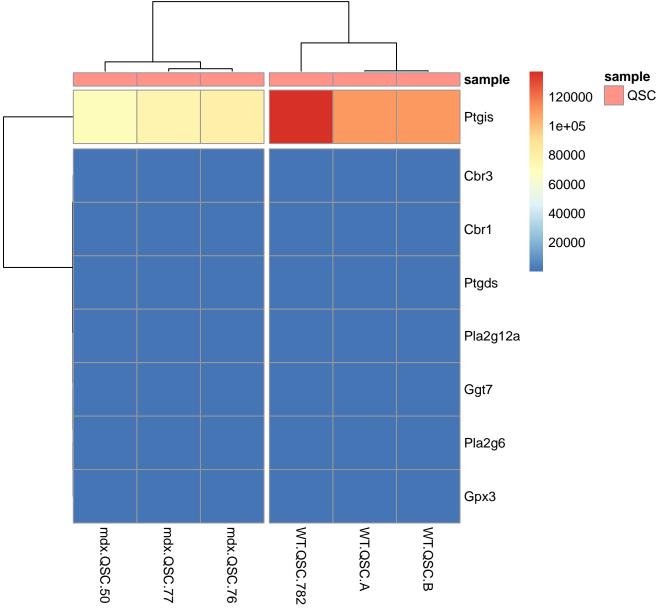


Expressed Matrix for genes active in KEGG_LYSINE_DEGRADATION



Scalling expressed matrix for genes active in **KEGG_LYSINE_DEGRADATION** 2 sample sample QSC 1.5 Aasdhppt 1 Aasdh 0.5 Ehmt1 0 Aadat -0.5 Acat1 -1 -1.5 Dot1I Aldh2 Ehmt2 Aldh7a1 Kmt5c Setd1b Setd7 Setmar Aldh3a2 WT.QSC.782 WT.QSC.A WT.QSC.B mdx.QSC.50 mdx.QSC.77 mdx.QSC.76

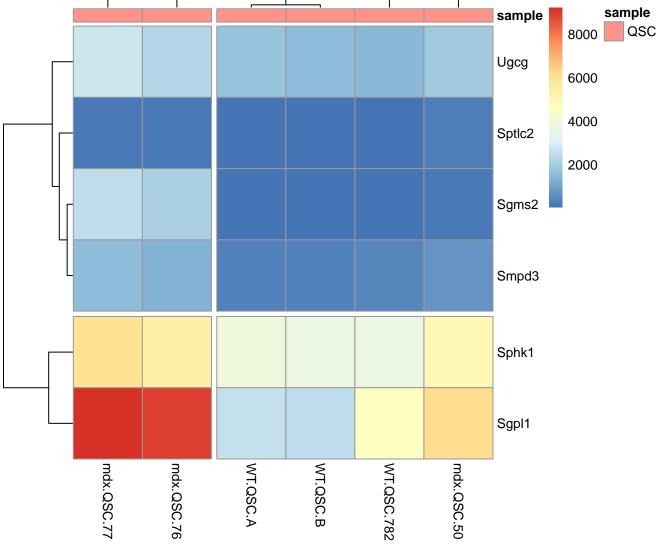
Expressed Matrix from Normalized for genes in KEGG_ARACHIDONIC_ACID_METABOLISM



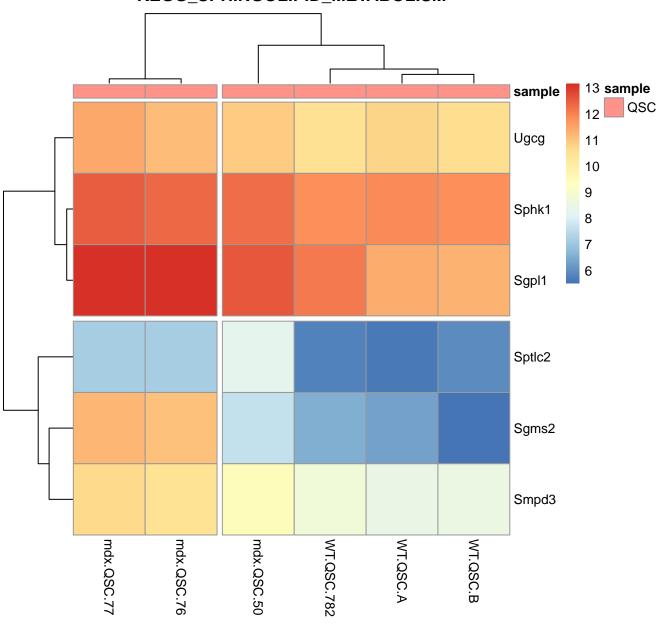
Expressed Matrix for genes active in KEGG_ARACHIDONIC_ACID_METABOLISM sample sample 16 QSC **Ptgis** 14 12 Cbr3 10 8 Cbr1 6 Pla2g12a **Ptgds** Ggt7 Pla2g6 Gpx3 mdx.QSC.50 mdx.QSC.77 mdx.QSC.76 WT.QSC.782 WT.QSC.A WT.QSC.B

Scalling expressed matrix for genes active in KEGG_ARACHIDONIC_ACID_METABOLISM sample sample 1.5 QSC 1 **Ptgds** 0.5 **Ptgis** 0 -0.5 Ggt7 -1 Gpx3 Cbr3 Cbr1 Pla2g6 Pla2g12a mdx.QSC.50 WT.QSC.B WT.QSC.782 mdx.QSC.77 mdx.QSC.76 WT.QSC.A

Expressed Matrix from Normalized for genes in KEGG_SPHINGOLIPID_METABOLISM sample sample QSC 8000 Ugcg 6000 4000 Sptlc2 2000 Sgms2



Expressed Matrix for genes active in KEGG_SPHINGOLIPID_METABOLISM



Scalling expressed matrix for genes active in KEGG_SPHINGOLIPID_METABOLISM sample sample QSC 1.5 Sptlc2 1 0.5 0 Sphk1 -0.5-1 Ugcg Sgpl1 Sgms2 Smpd3 mdx.QSC.77 mdx.QSC.76 mdx.QSC.50 WT.QSC.A WT.QSC.B WT.QSC.782

Expressed Matrix from Normalized for genes in KEGG_ONE_CARBON_POOL_BY_FOLATE sample sample QSC 6000 Mtfmt 5000 4000 Mtr 3000 Mthfd2l 2000 1000 Gart Atic Mthfd1 Shmt1 Amt Mthfd1I WT.QSC.B WT.QSC.A mdx.QSC.50 mdx.QSC.77 mdx.QSC.76 WT.QSC.782

Expressed Matrix for genes active in KEGG_ONE_CARBON_POOL_BY_FOLATE sample sample QSC 12 Atic 11 Gart 10 Mtr 9 Mthfd2l Mtfmt Amt Mthfd1I Shmt1 Mthfd1 mdx.QSC.50 WT.QSC.782 WT.QSC.A WT.QSC.B mdx.QSC.77 mdx.QSC.76

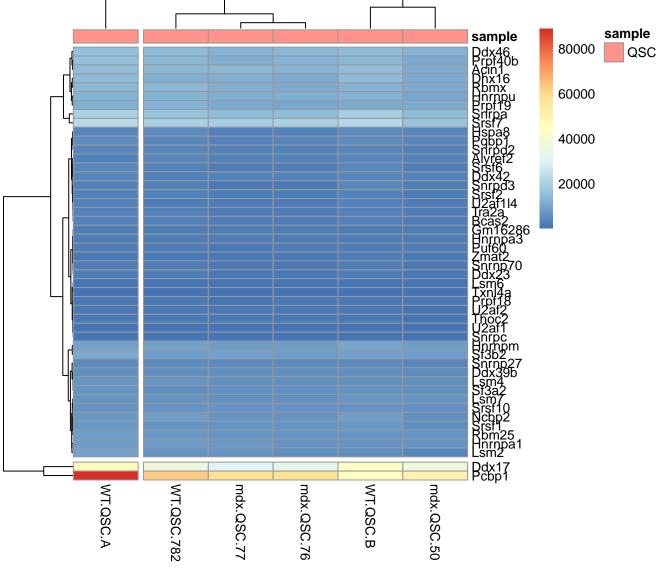
Scalling expressed matrix for genes active in KEGG_ONE_CARBON_POOL_BY_FOLATE sample sample 1.5 QSC Mtr 1 0.5 Amt 0 Atic -0.5-1 Gart Shmt1 Mthfd1 Mthfd1I Mtfmt Mthfd2l mdx.QSC.50 WT.QSC.782 WT.QSC.A WT.QSC.B mdx.QSC.77 mdx.QSC.76

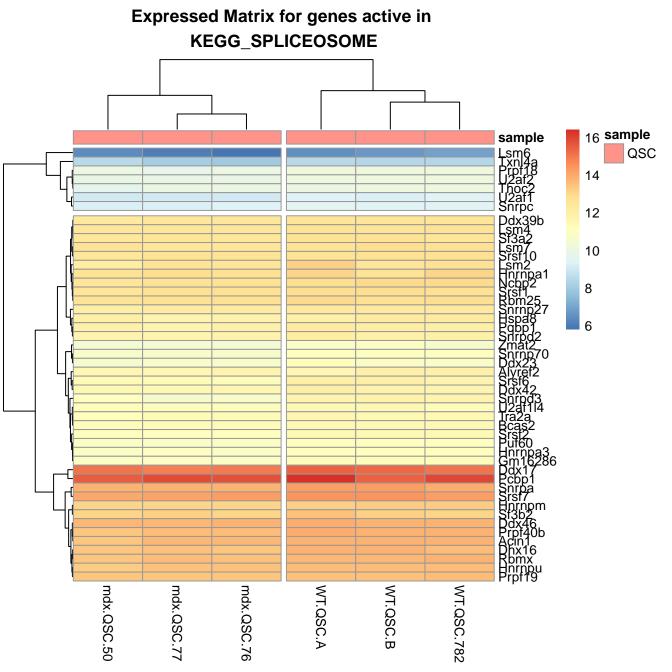
Expressed Matrix from Normalized for genes in KEGG_RIBOSOME 80000 **sample** sample QSC 60000 40000 20000 WT.QSC.782 WT.QSC.A mdx.QSC.50 WT.QSC.B mdx.QSC.76

Expressed Matrix for genes active in KEGG_RIBOSOME 16 sample sample 807-307-608 807-608 807-608 807-608 807-608 807-608 807-608 807-608 807-608 80 15 14 13 12 11 mdx.QSC.77 WT.QSC.782 mdx.QSC.76 mdx.QSC.50 WT.QSC.B

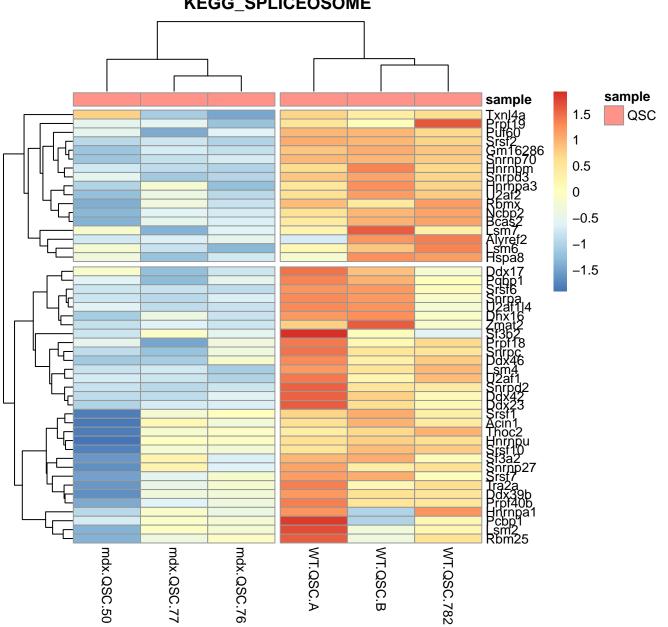
Scalling expressed matrix for genes active in **KEGG_RIBOSOME** 2 sample sample QSC 1.5 1 0.5 0 -0.5-1 -1.5mdx.QSC.76 WT.QSC.B mdx.QSC.77 mdx.QSC.50 WT.QSC.782 WT.QSC.A

Expressed Matrix from Normalized for genes in KEGG_SPLICEOSOME sample sample 80000 QSC 60000 40000 20000

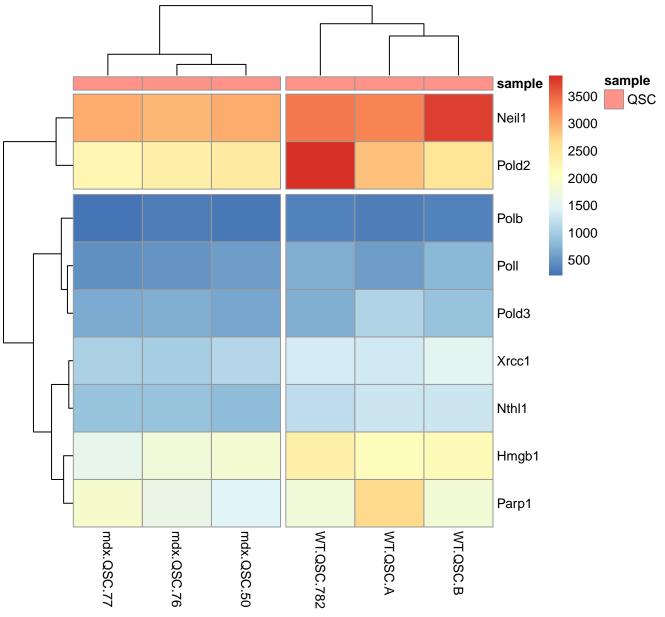




Scalling expressed matrix for genes active in KEGG_SPLICEOSOME



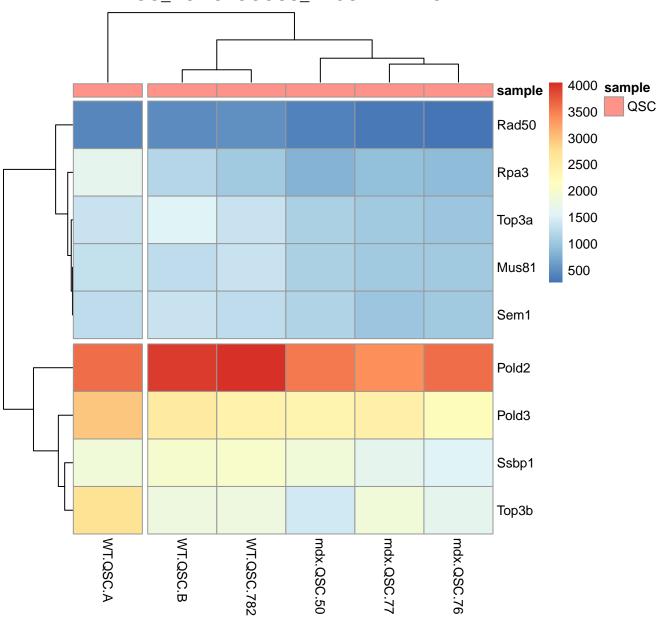
Expressed Matrix from Normalized for genes in KEGG_BASE_EXCISION_REPAIR



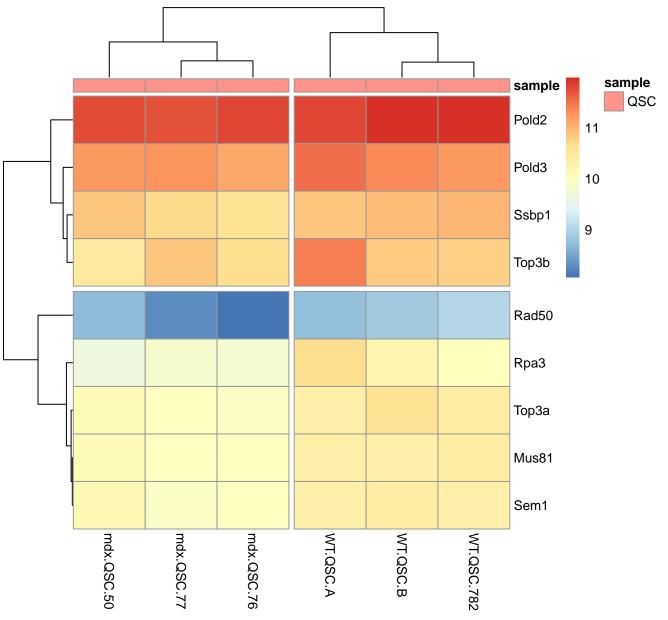
Expressed Matrix for genes active in KEGG_BASE_EXCISION_REPAIR sample sample QSC Hmgb1 11 Parp1 10 Neil1 9 Pold2 8 Polb Xrcc1 Nthl1 Poll Pold3 mdx.QSC.77 mdx.QSC.76 mdx.QSC.50 WT.QSC.A WT.QSC.B WT.QSC.782

Scalling expressed matrix for genes active in KEGG_BASE_EXCISION_REPAIR sample sample QSC 1.5 Nthl1 1 0.5 Parp1 0 -0.5 Pold3 -1 Pold2 -1.5 Hmgb1 Polb Poll Neil1 Xrcc1 mdx.QSC.77 mdx.QSC.76 mdx.QSC.50 WT.QSC.A WT.QSC.B WT.QSC.782

Expressed Matrix from Normalized for genes in KEGG_HOMOLOGOUS_RECOMBINATION

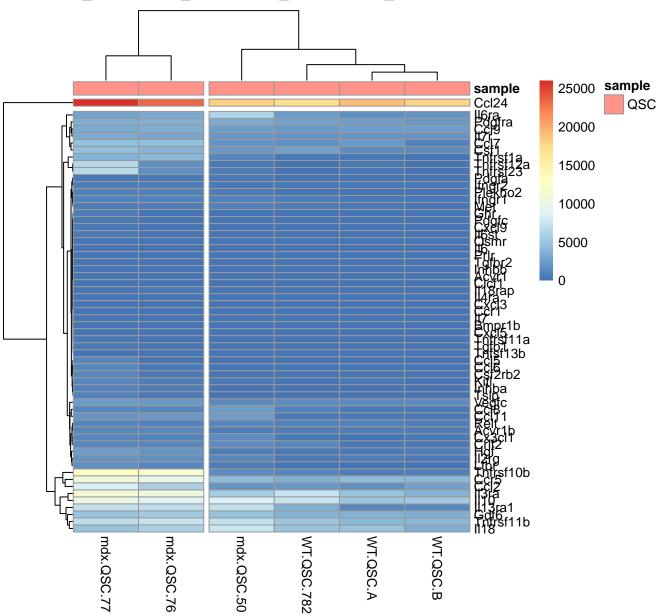


Expressed Matrix for genes active in KEGG_HOMOLOGOUS_RECOMBINATION

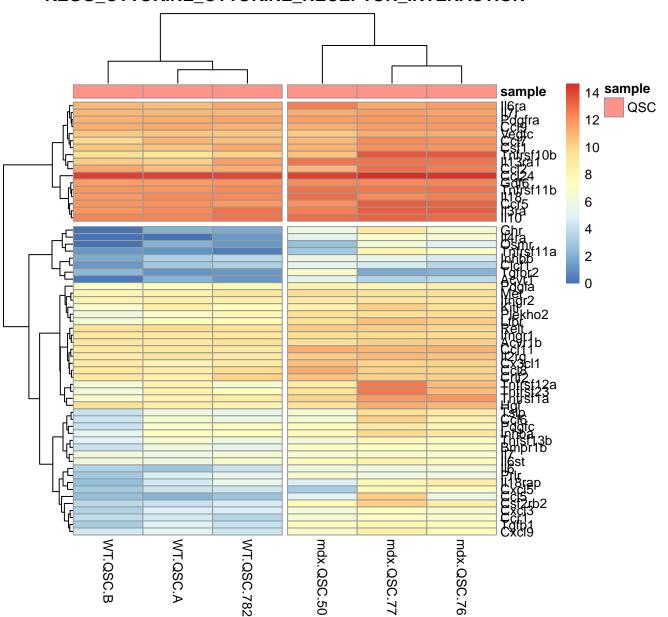


Scalling expressed matrix for genes active in **KEGG_HOMOLOGOUS_RECOMBINATION** sample sample QSC 1.5 Top3b 1 0.5 Rpa3 0 Pold3 -0.5 -1 Pold2 -1.5 Ssbp1 Rad50 Mus81 Top3a Sem1 mdx.QSC.50 mdx.QSC.77 mdx.QSC.76 WT.QSC.A WT.QSC.B WT.QSC.782

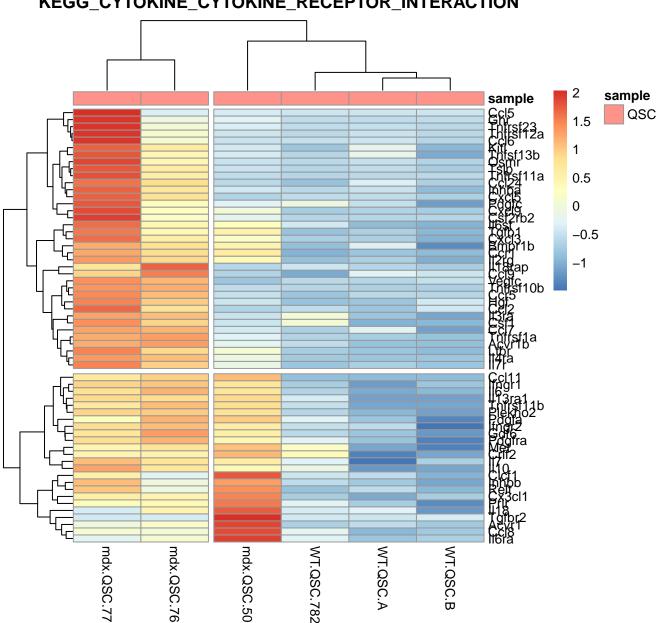
Expressed Matrix from Normalized for genes in KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION



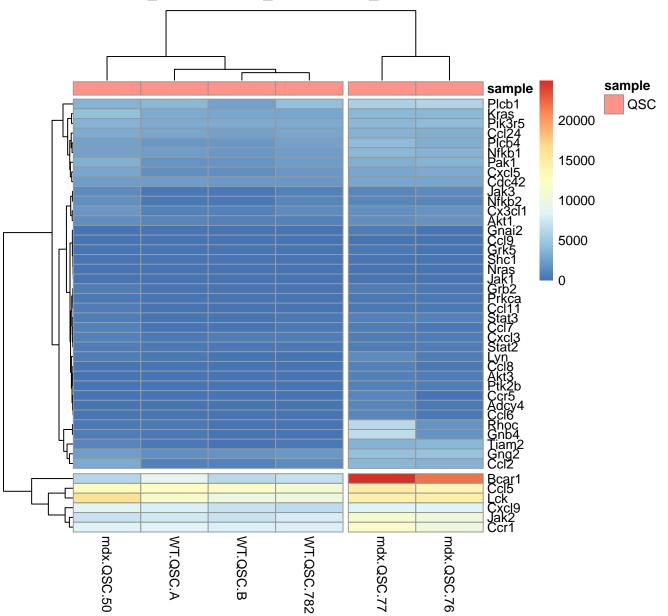
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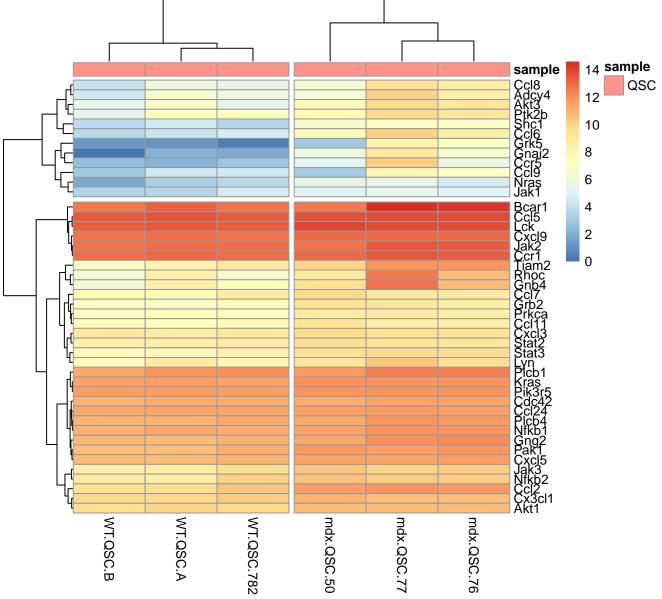
Scalling expressed matrix for genes active in KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION



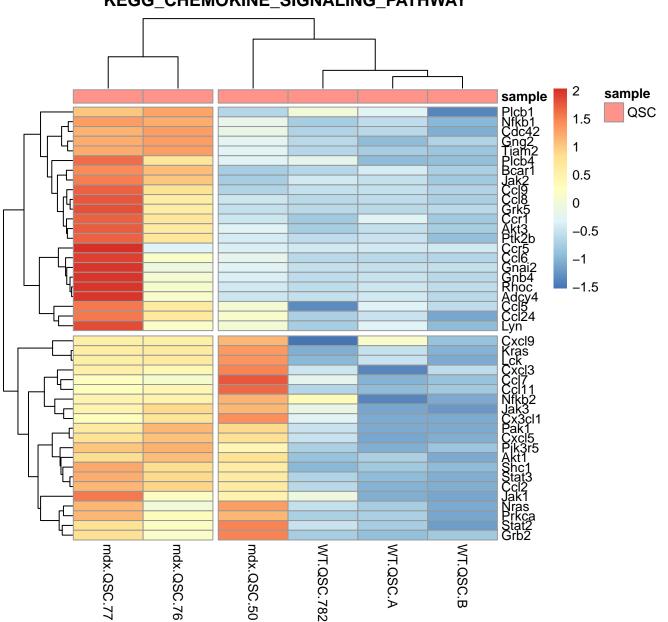
Expressed Matrix from Normalized for genes in KEGG_CHEMOKINE_SIGNALING_PATHWAY



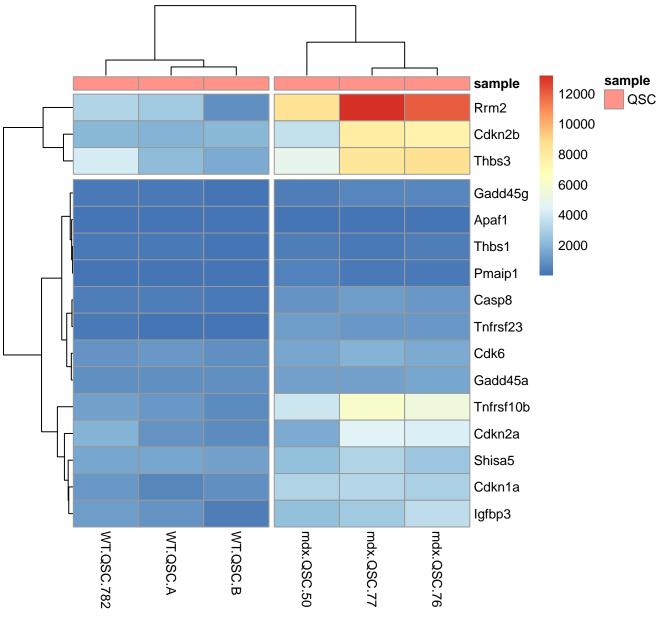
Expressed Matrix for genes active in KEGG_CHEMOKINE_SIGNALING_PATHWAY ₁₄ sample sample Ccl8 4 Acty b Akty b Ccrk5 1 Ccl9 SCCl9 ak1 QSC 12 10 8 6 4 2 0



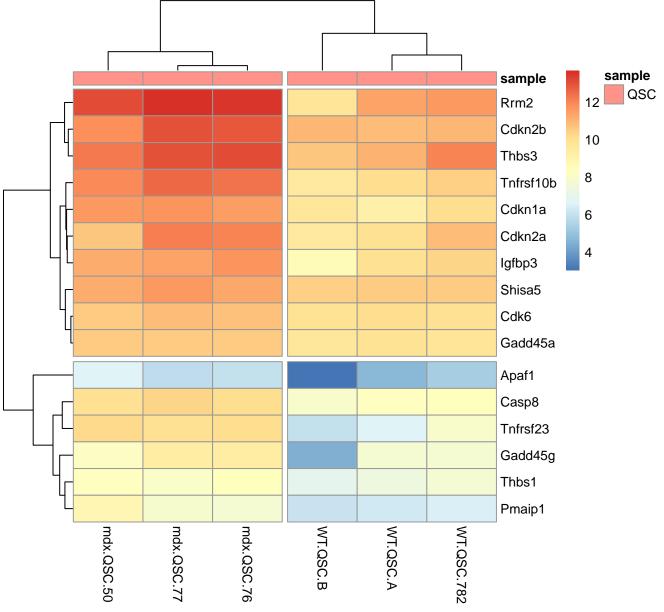
Scalling expressed matrix for genes active in KEGG_CHEMOKINE_SIGNALING_PATHWAY



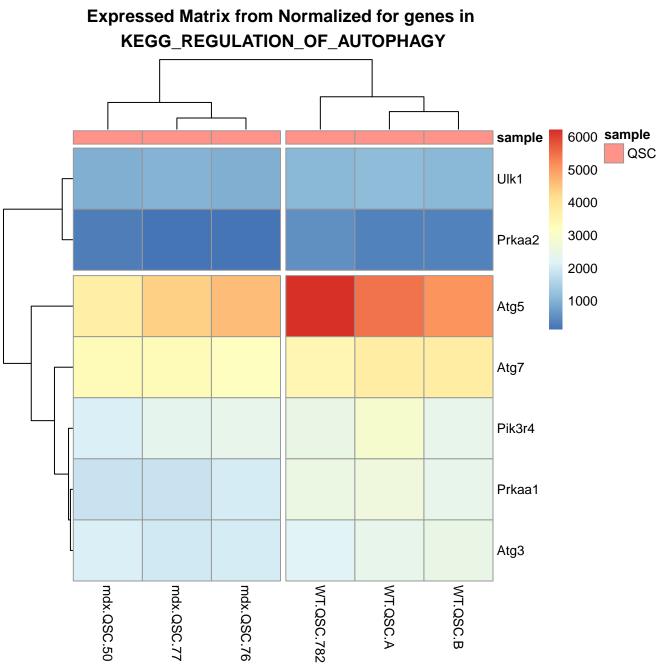
Expressed Matrix from Normalized for genes in KEGG_P53_SIGNALING_PATHWAY



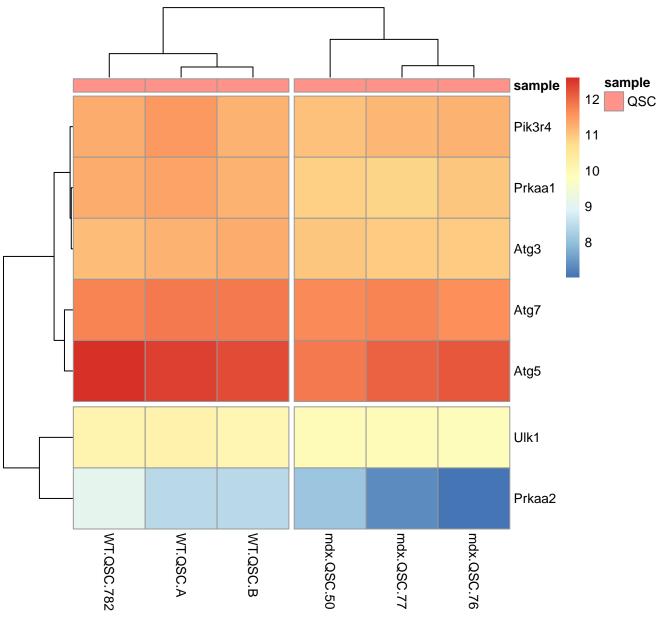
Expressed Matrix for genes active in KEGG_P53_SIGNALING_PATHWAY



Scalling expressed matrix for genes active in **KEGG_P53_SIGNALING_PATHWAY** sample sample 1.5 QSC Pmaip1 1 Apaf1 0.5 Cdkn2b 0 Gadd45g Cdkn2a -0.5Thbs3 -1 Igfbp3 Thbs1 Rrm2 Tnfrsf10b Cdk6 Shisa5 Cdkn1a Tnfrsf23 Casp8 Gadd45a WT.QSC.B mdx.QSC.76 WT.QSC.A WT.QSC.782 mdx.QSC.50 mdx.QSC.77

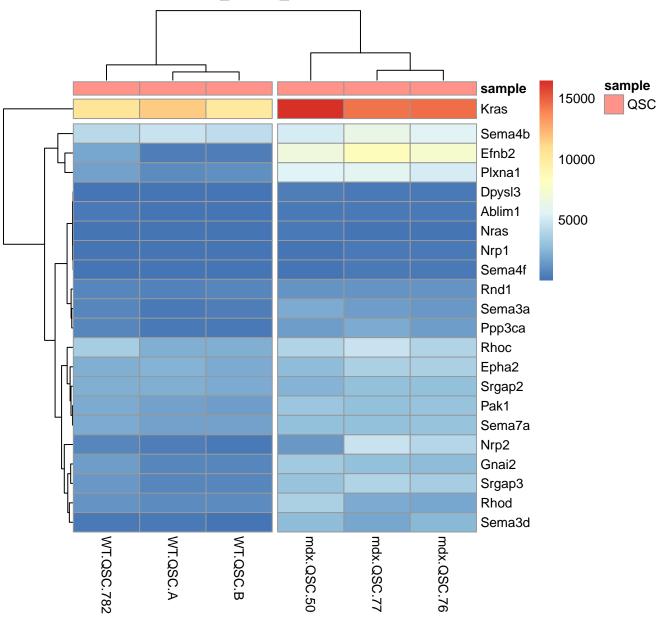


Expressed Matrix for genes active in KEGG_REGULATION_OF_AUTOPHAGY



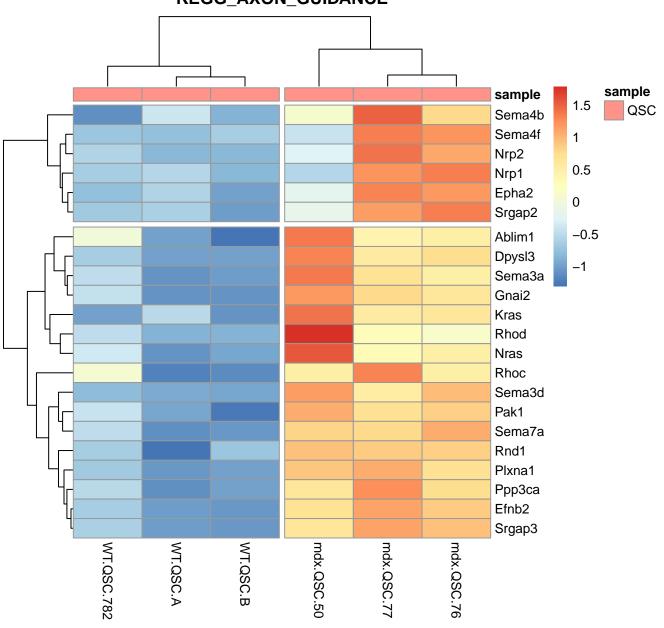
Scalling expressed matrix for genes active in KEGG_REGULATION_OF_AUTOPHAGY sample sample 1.5 QSC Prkaa2 1 0.5 Atg5 0 -0.5 Ulk1 -1 Prkaa1 Pik3r4 Atg7 Atg3 mdx.QSC.50 mdx.QSC.76 WT.QSC.782 WT.QSC.A WT.QSC.B mdx.QSC.77

Expressed Matrix from Normalized for genes in KEGG_AXON_GUIDANCE

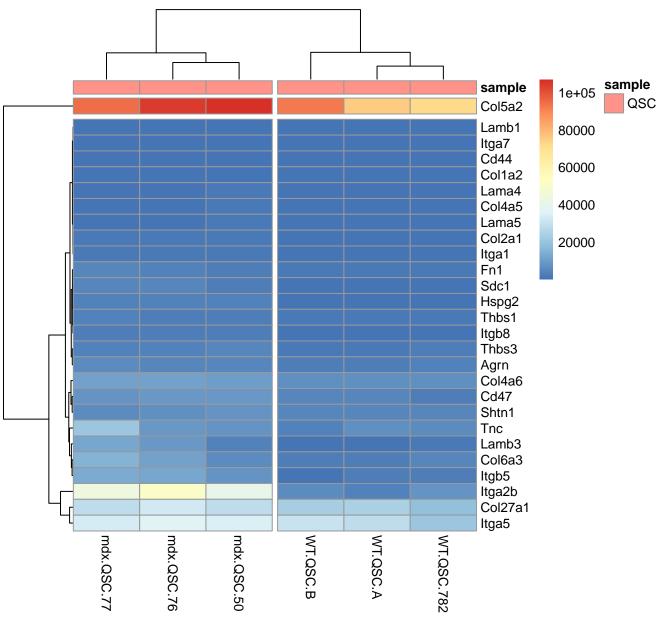


Expressed Matrix for genes active in KEGG_AXON_GUIDANCE ¹⁴ sample sample QSC Dpysl3 12 Ablim1 Nras Nrp1 10 Sema4f 8 Sema4b Kras Rnd1 6 Sema3a Ppp3ca Sema3d Nrp2 Efnb2 Plxna1 Rhod Gnai2 Srgap3 Rhoc Pak1 Sema7a Epha2 Srgap2 mdx.QSC.50 mdx.QSC.77 mdx.QSC.76 WT.QSC.782 WT.QSC.B WT.QSC.A

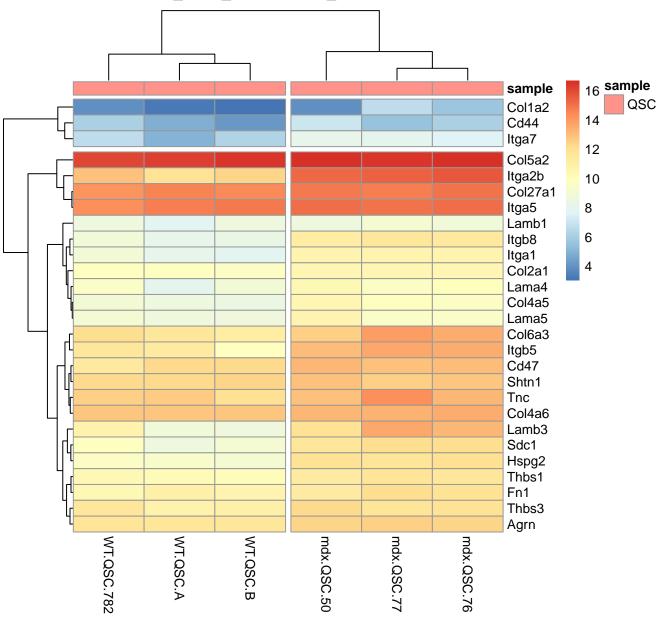
Scalling expressed matrix for genes active in KEGG_AXON_GUIDANCE



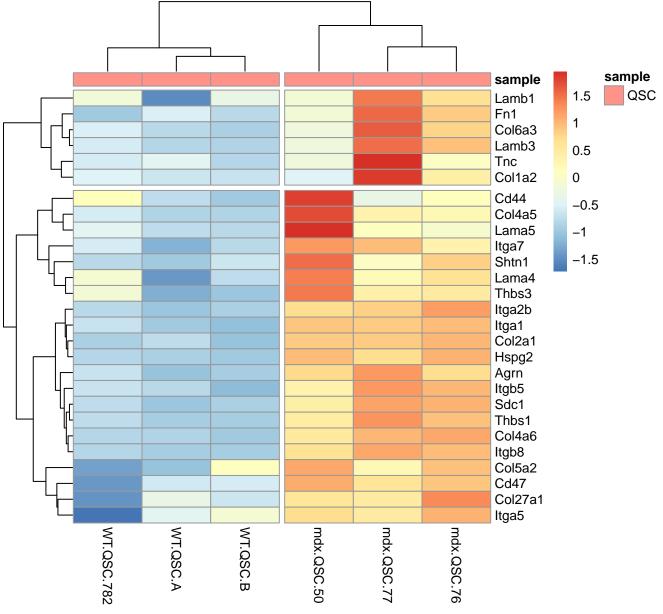
Expressed Matrix from Normalized for genes in KEGG_ECM_RECEPTOR_INTERACTION



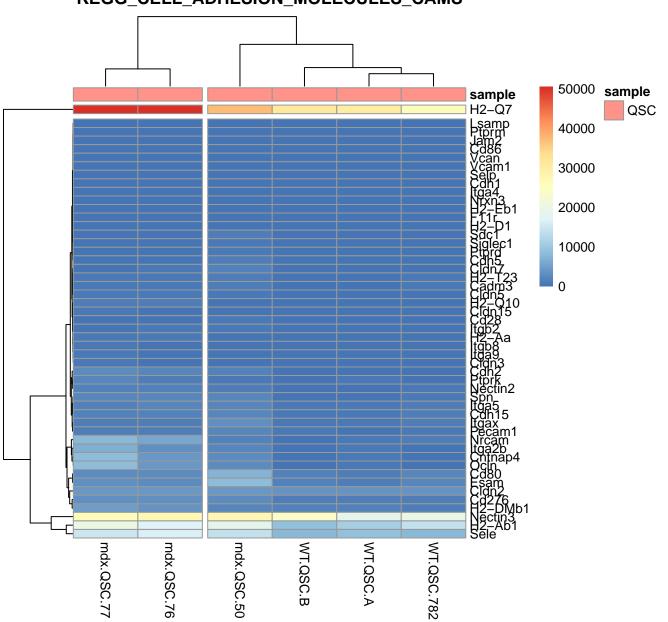
Expressed Matrix for genes active in KEGG_ECM_RECEPTOR_INTERACTION



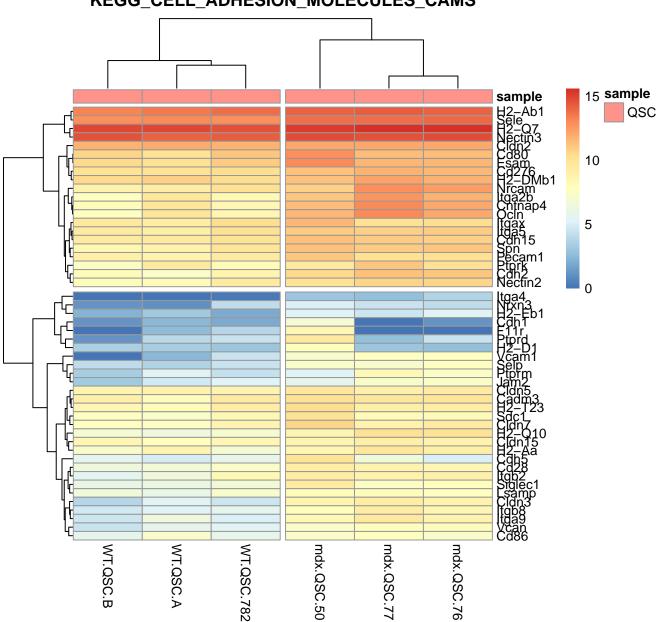
Scalling expressed matrix for genes active in KEGG_ECM_RECEPTOR_INTERACTION



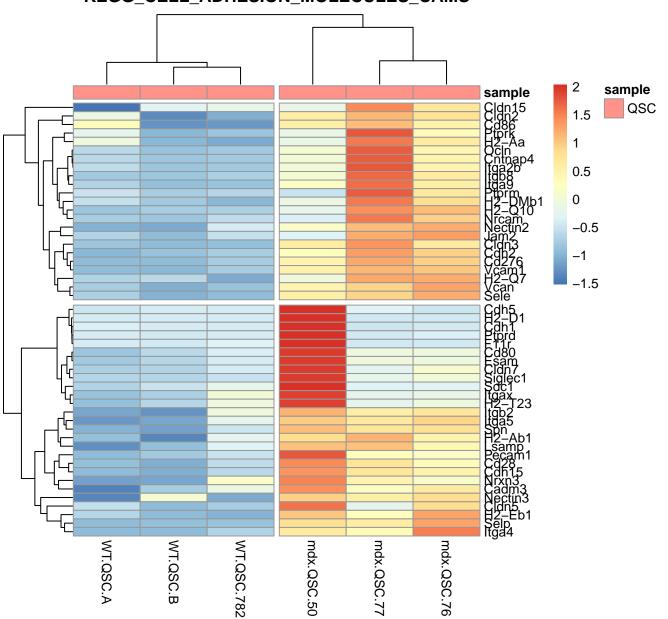
Expressed Matrix from Normalized for genes in KEGG_CELL_ADHESION_MOLECULES_CAMS

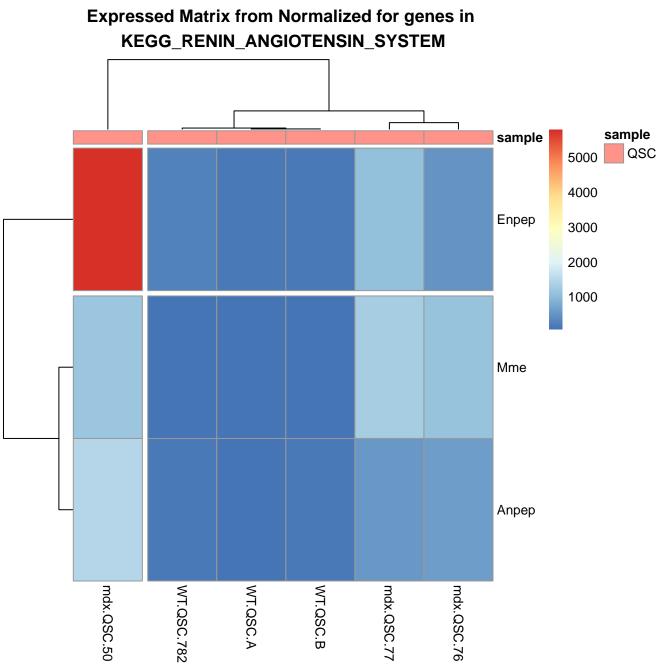


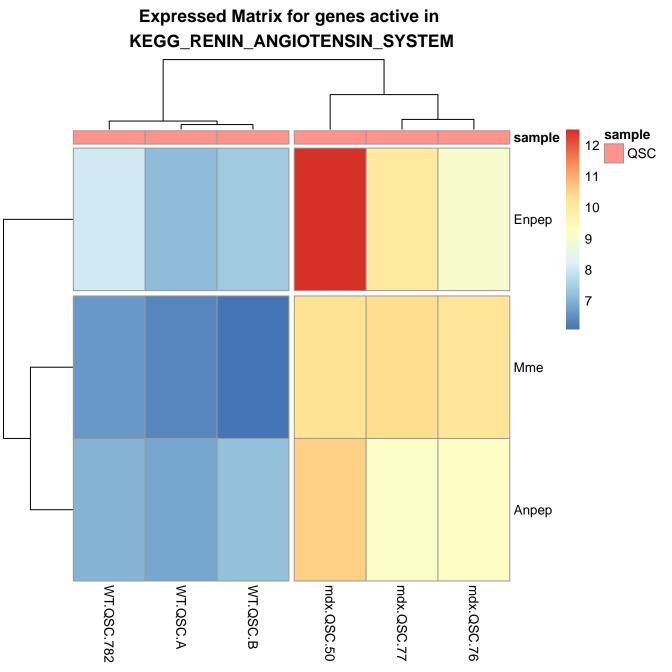
Expressed Matrix for genes active in KEGG_CELL_ADHESION_MOLECULES_CAMS



Scalling expressed matrix for genes active in KEGG_CELL_ADHESION_MOLECULES_CAMS

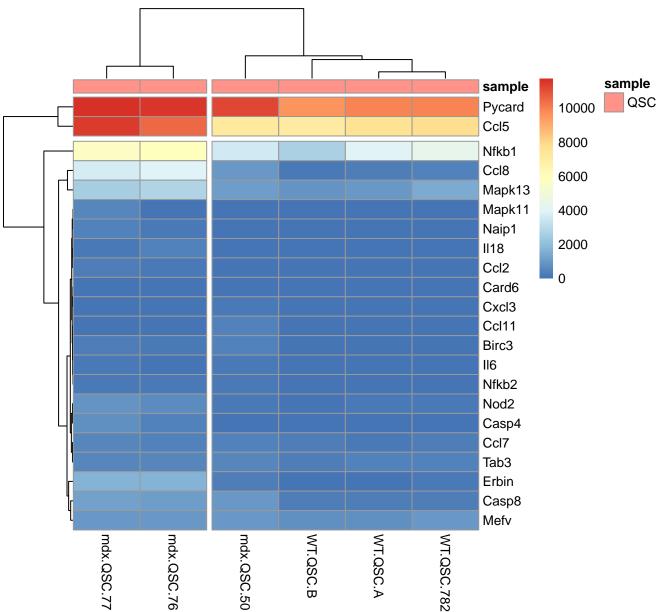




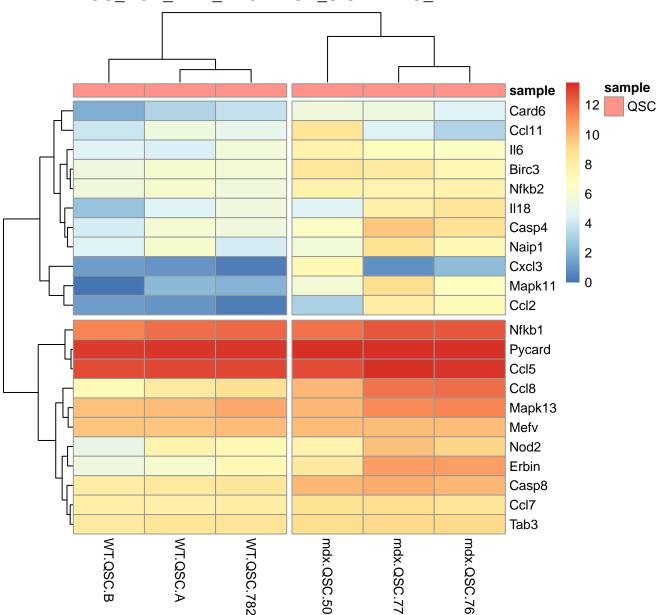


Scalling expressed matrix for genes active in KEGG_RENIN_ANGIOTENSIN_SYSTEM 2 sample sample QSC 1.5 1 Mme 0.5 0 -0.5 Anpep Enpep mdx.QSC.50 WT.QSC.B WT.QSC.A WT.QSC.782 mdx.QSC.77 mdx.QSC.76

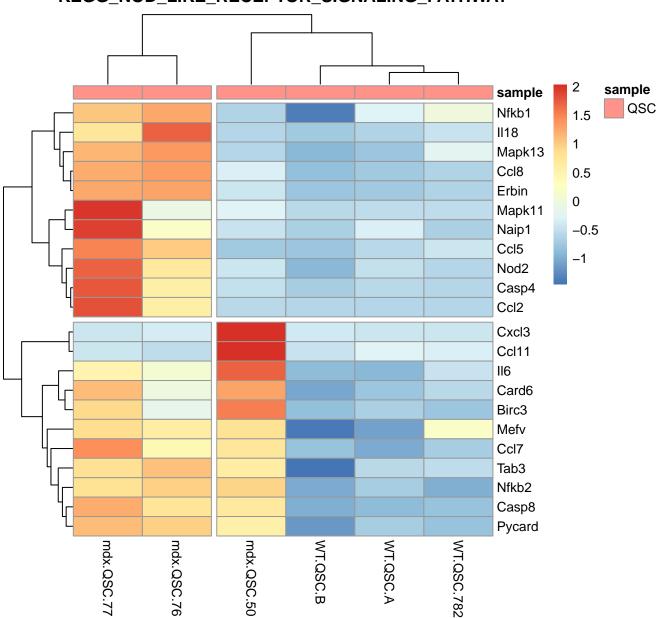
Expressed Matrix from Normalized for genes in KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY



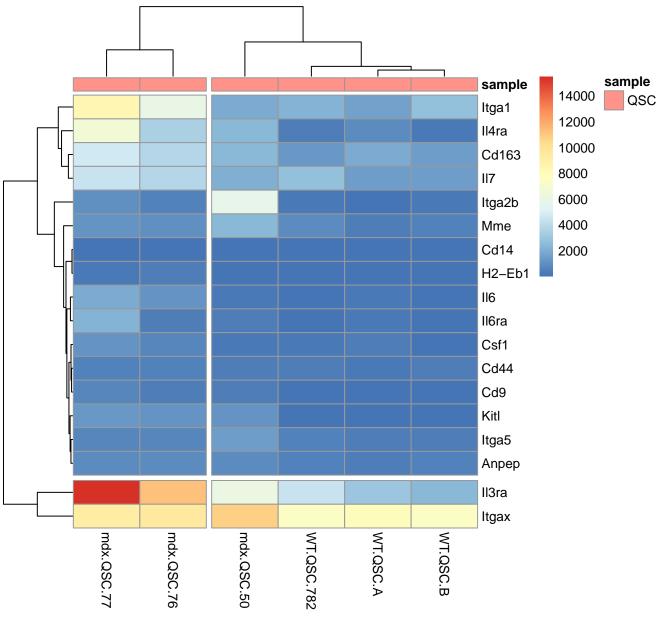
Expressed Matrix for genes active in KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY



Scalling expressed matrix for genes active in KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY

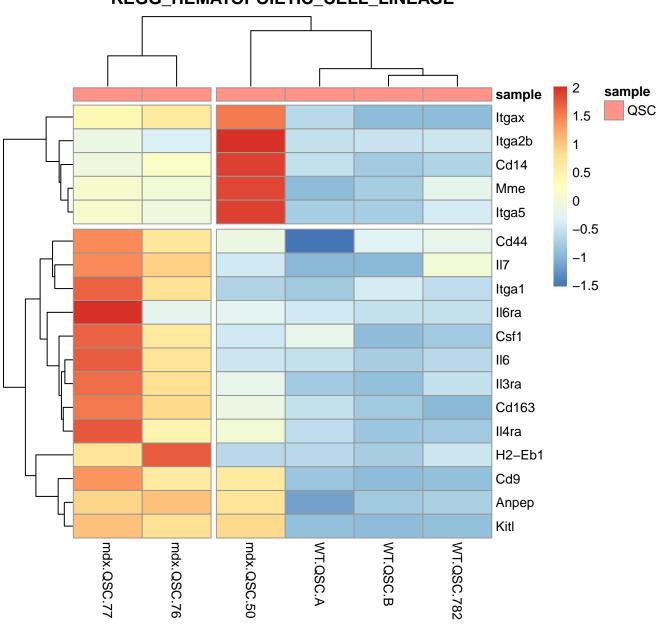


Expressed Matrix from Normalized for genes in KEGG_HEMATOPOIETIC_CELL_LINEAGE

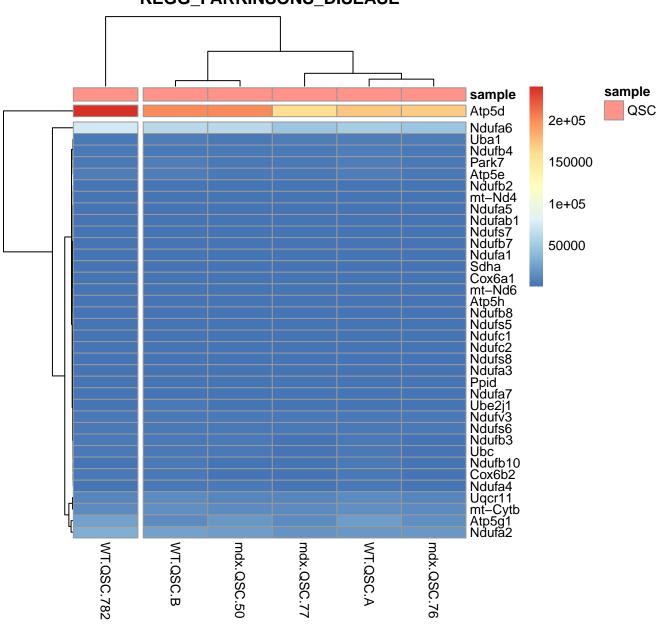


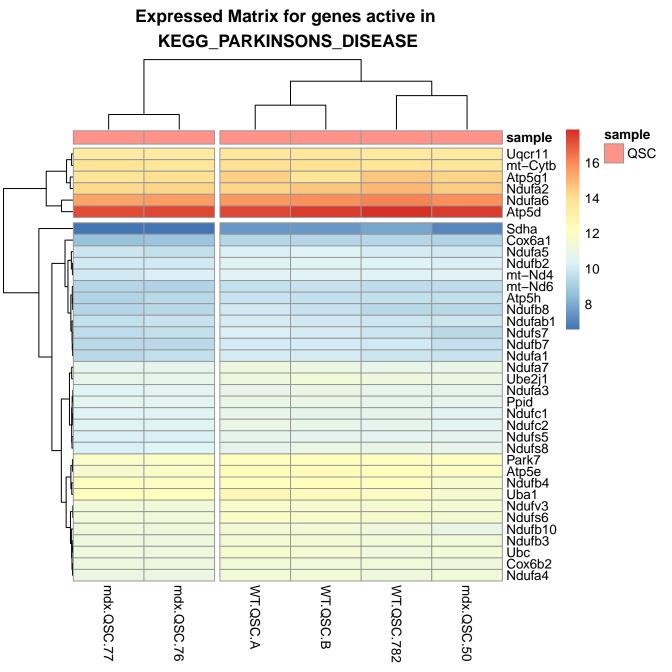
Expressed Matrix for genes active in KEGG_HEMATOPOIETIC_CELL_LINEAGE sample sample QSC 12 Cd14 H2-Eb1 10 Cd9 8 Itga1 6 Cd163 4 117 2 II3ra Itgax Kitl Il6ra 116 Csf1 II4ra Itga2b Cd44 Mme Itga5 Anpep WT.QSC.B WT.QSC.A WT.QSC.782 mdx.QSC.77 mdx.QSC.76 mdx.QSC.50

Scalling expressed matrix for genes active in KEGG_HEMATOPOIETIC_CELL_LINEAGE



Expressed Matrix from Normalized for genes in KEGG_PARKINSONS_DISEASE





Scalling expressed matrix for genes active in KEGG_PARKINSONS_DISEASE

