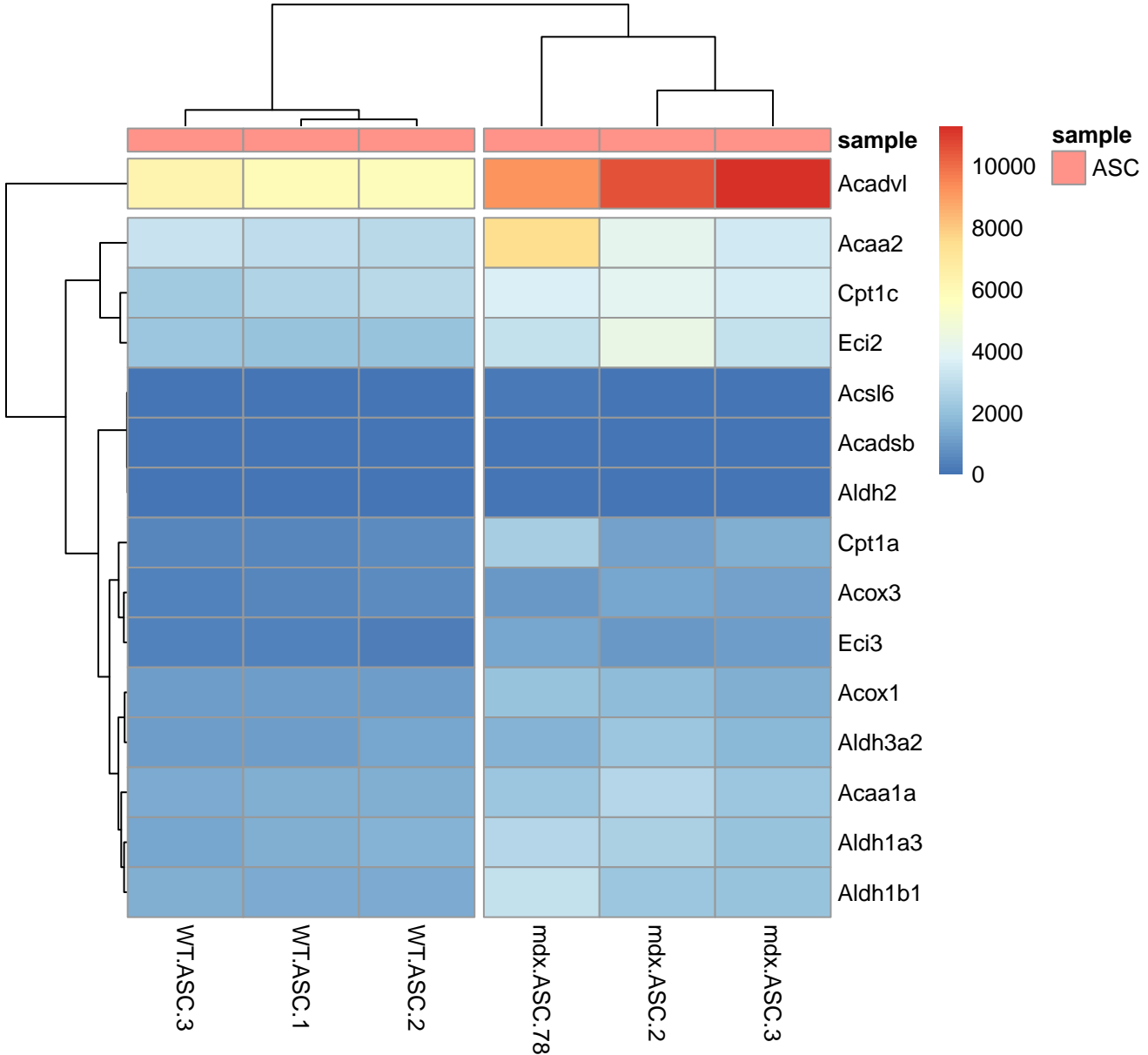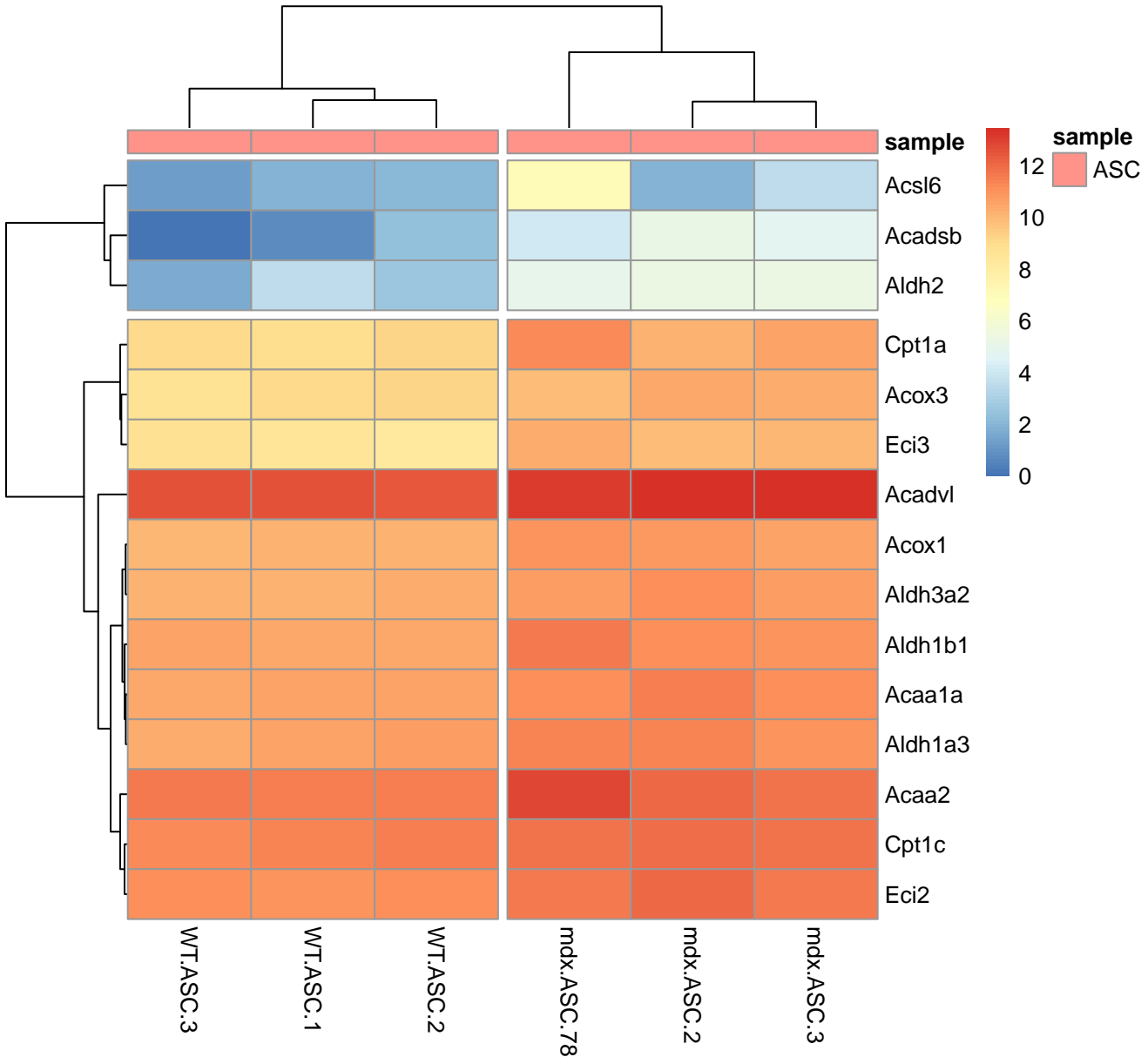**Expressed Matrix from Normalized for genes in KEGG_FATTY_ACID_METABOLISM**
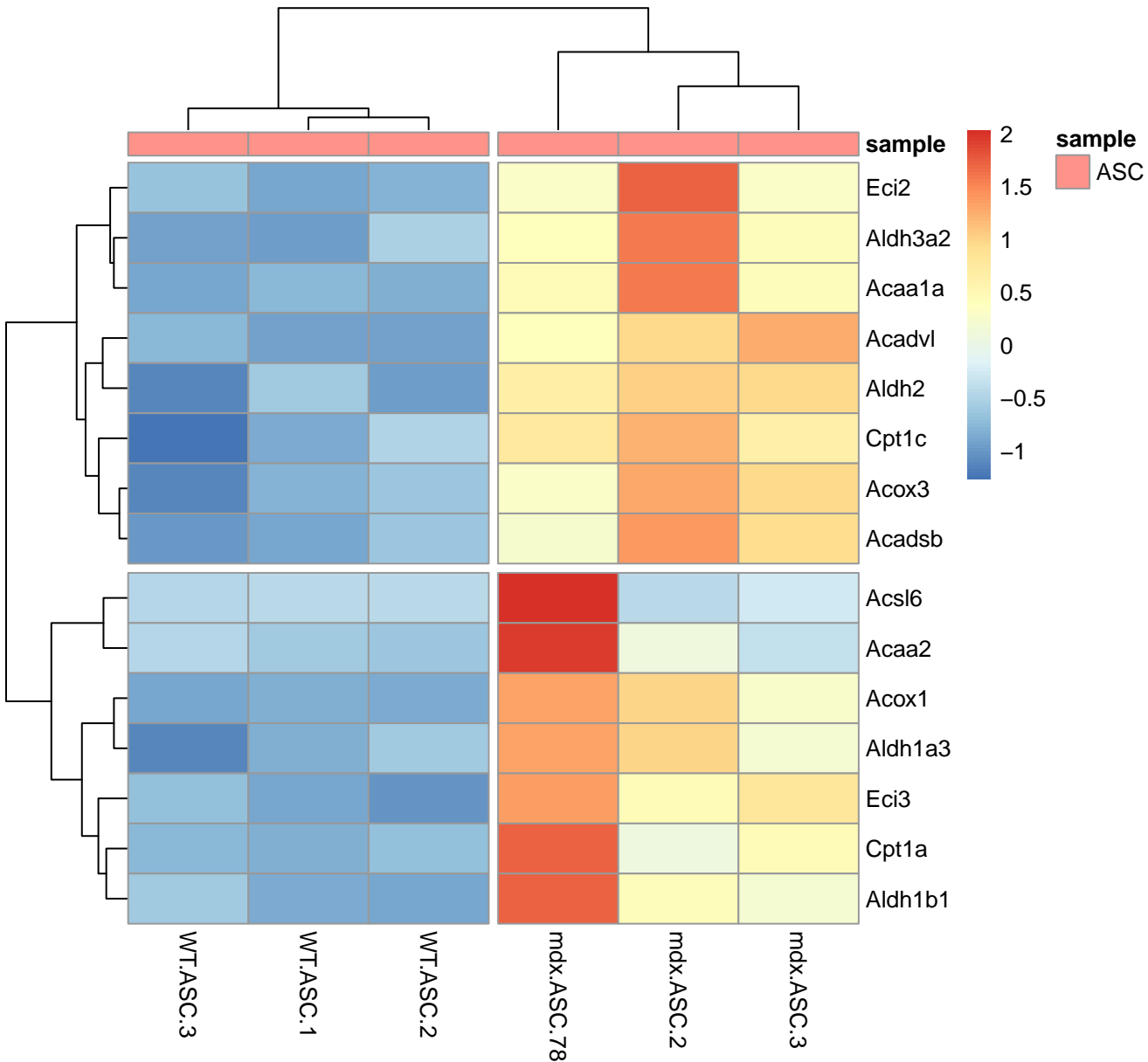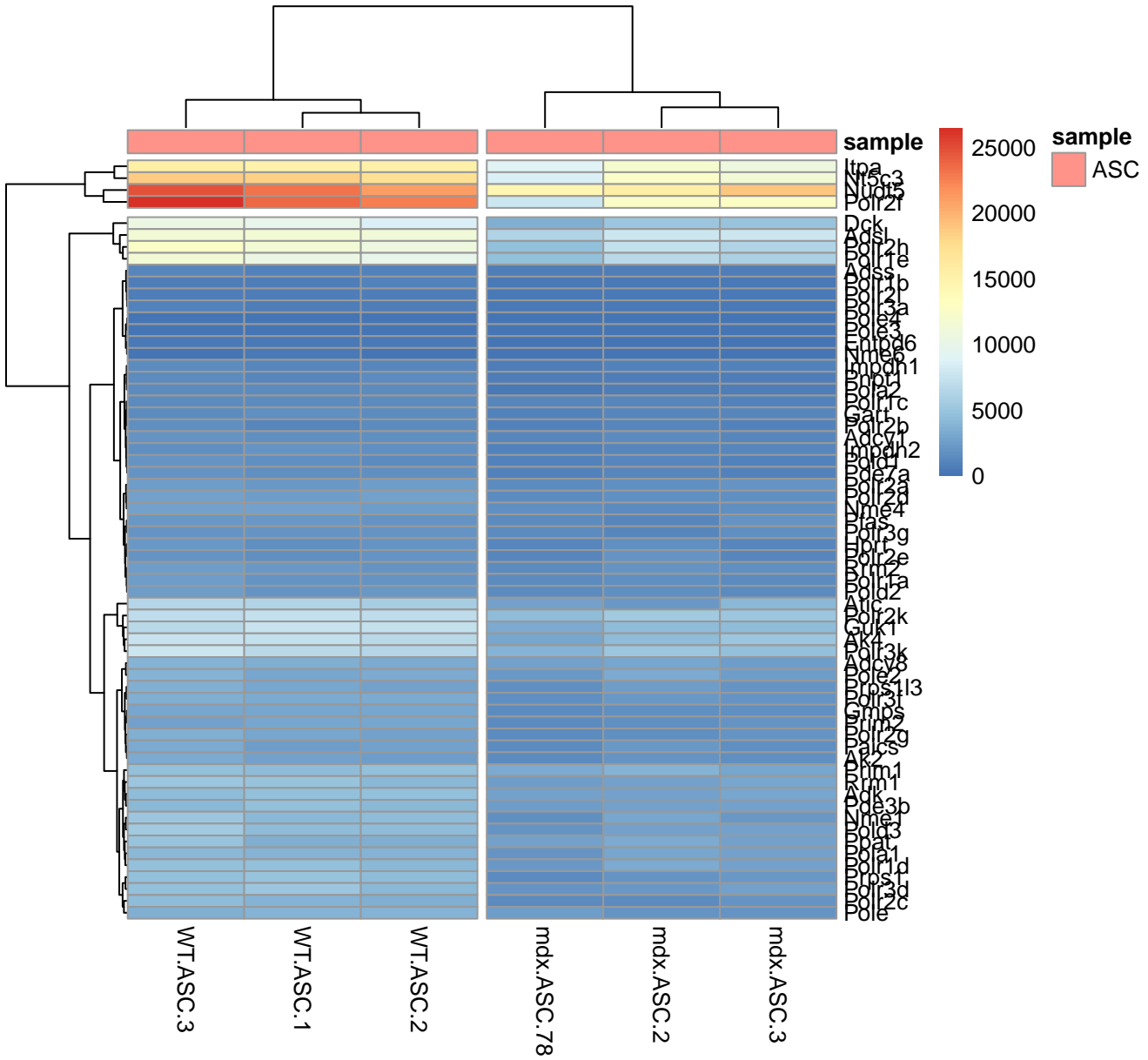
Expressed Matrix for genes active in KEGG_FATTY_ACID_METABOLISM

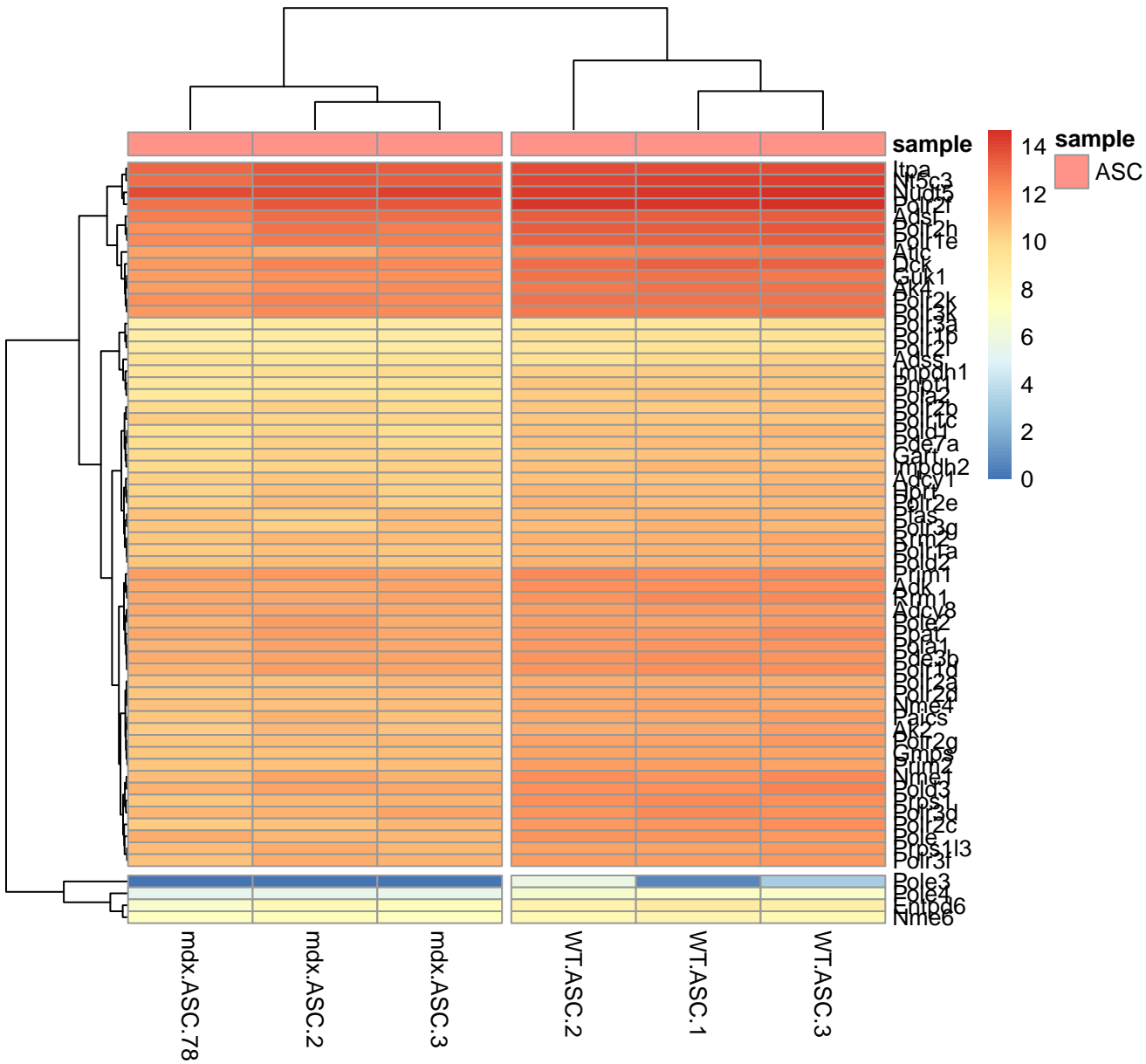# Scalling expressed matrix for genes active in
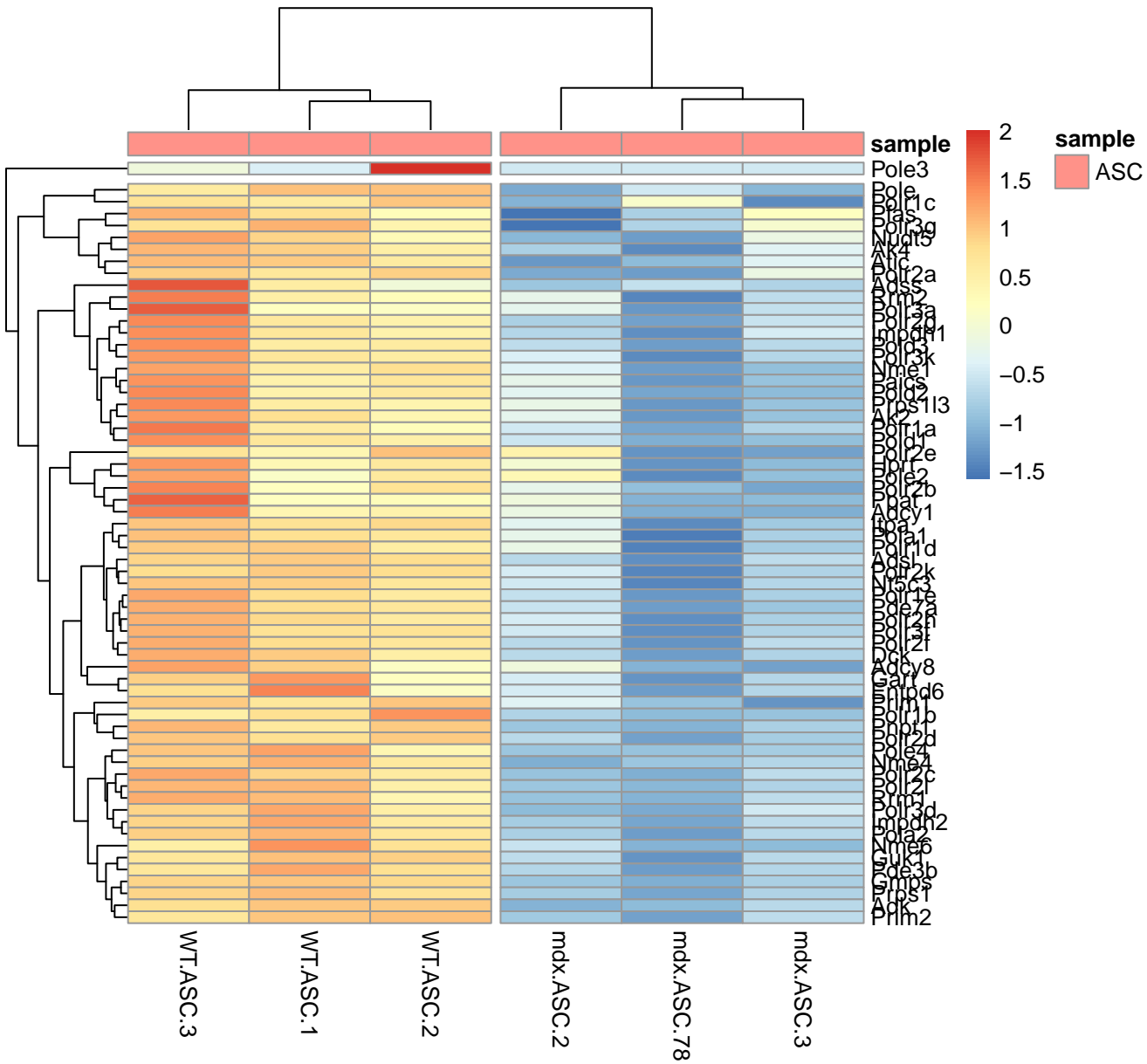# KEGG_FATTY_ACID_METABOLISM

Expressed Matrix from Normalized for genes in
KEGG_PURINE_METABOLISM

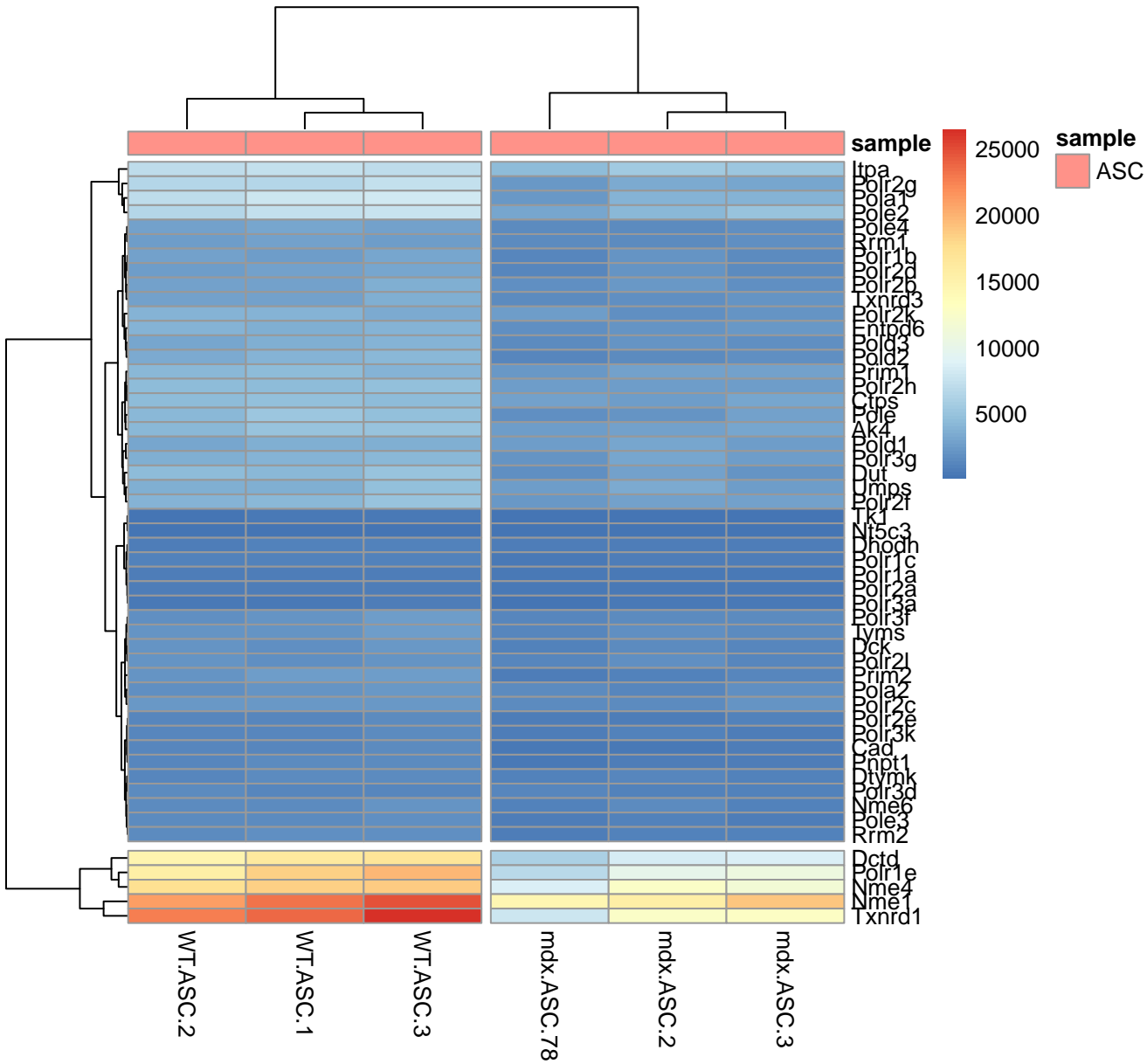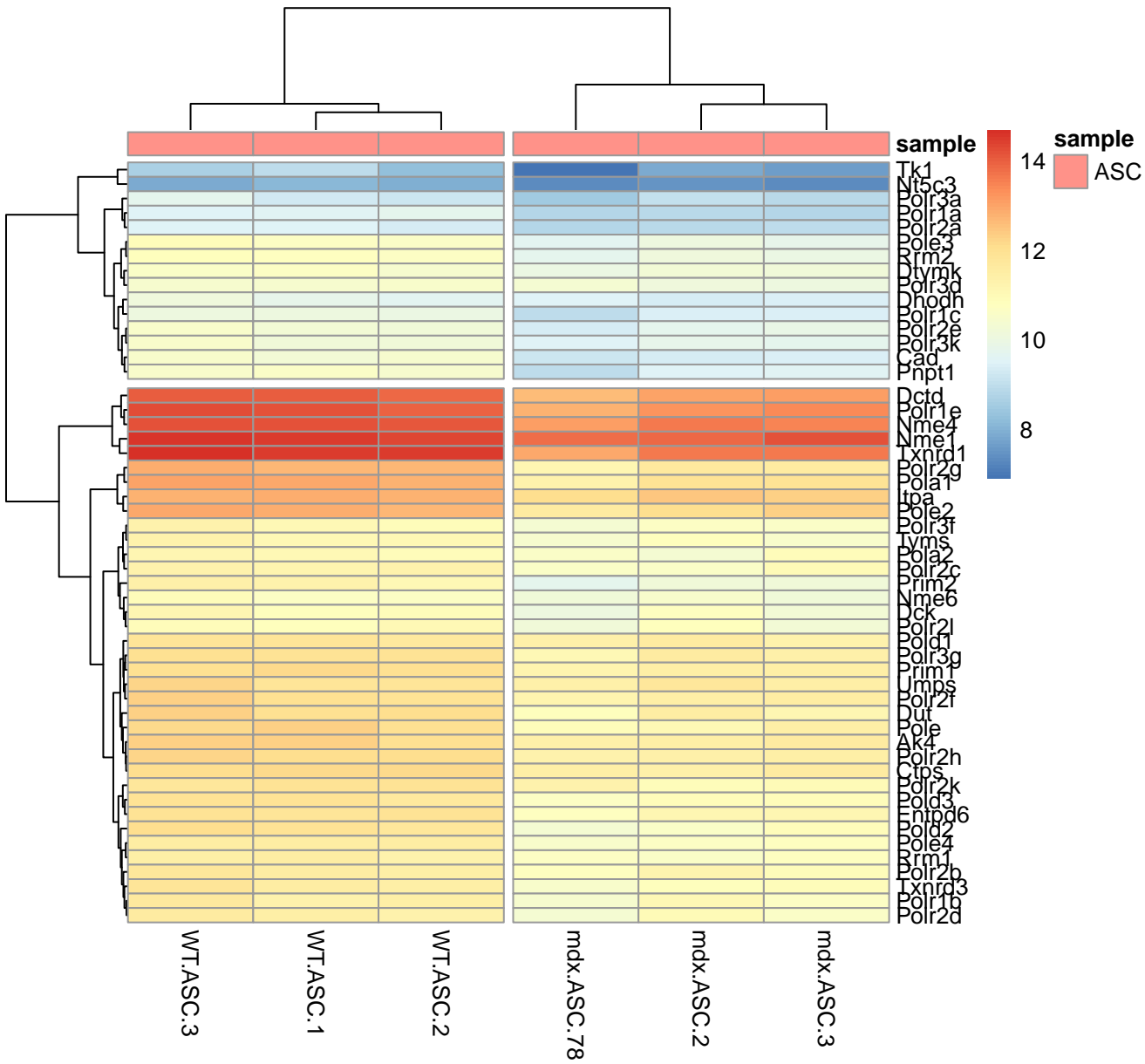# Expressed Matrix for genes active in
KEGG_PURINE_METABOLISM

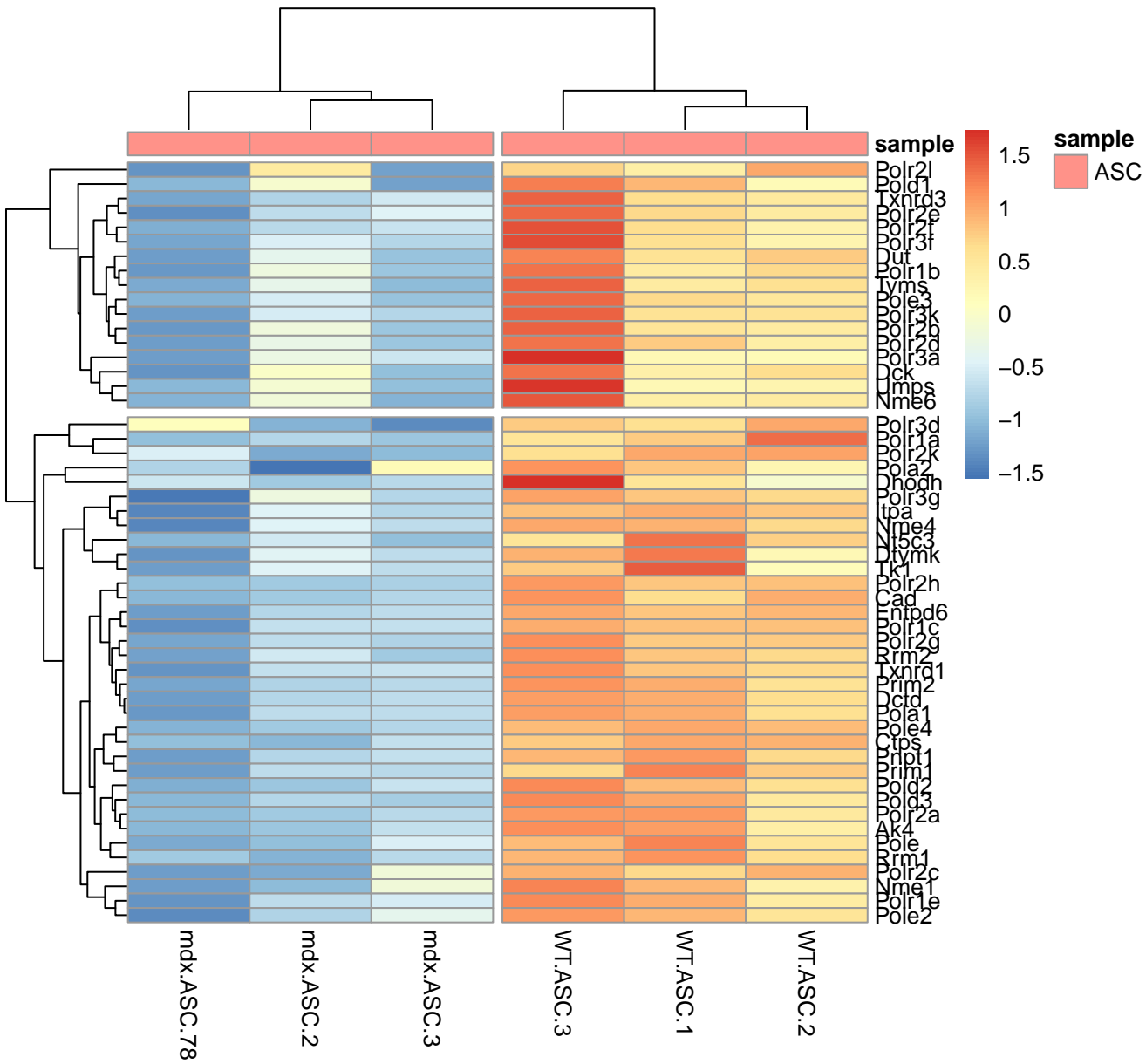**Scalling expressed matrix for genes active in KEGG_PURINE_METABOLISM**

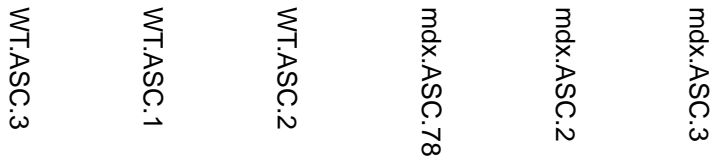**Expressed Matrix from Normalized for genes in KEGG_PYRIMIDINE_METABOLISM**

Expressed Matrix for genes active in
KEGG_PYRIMIDINE_METABOLISM

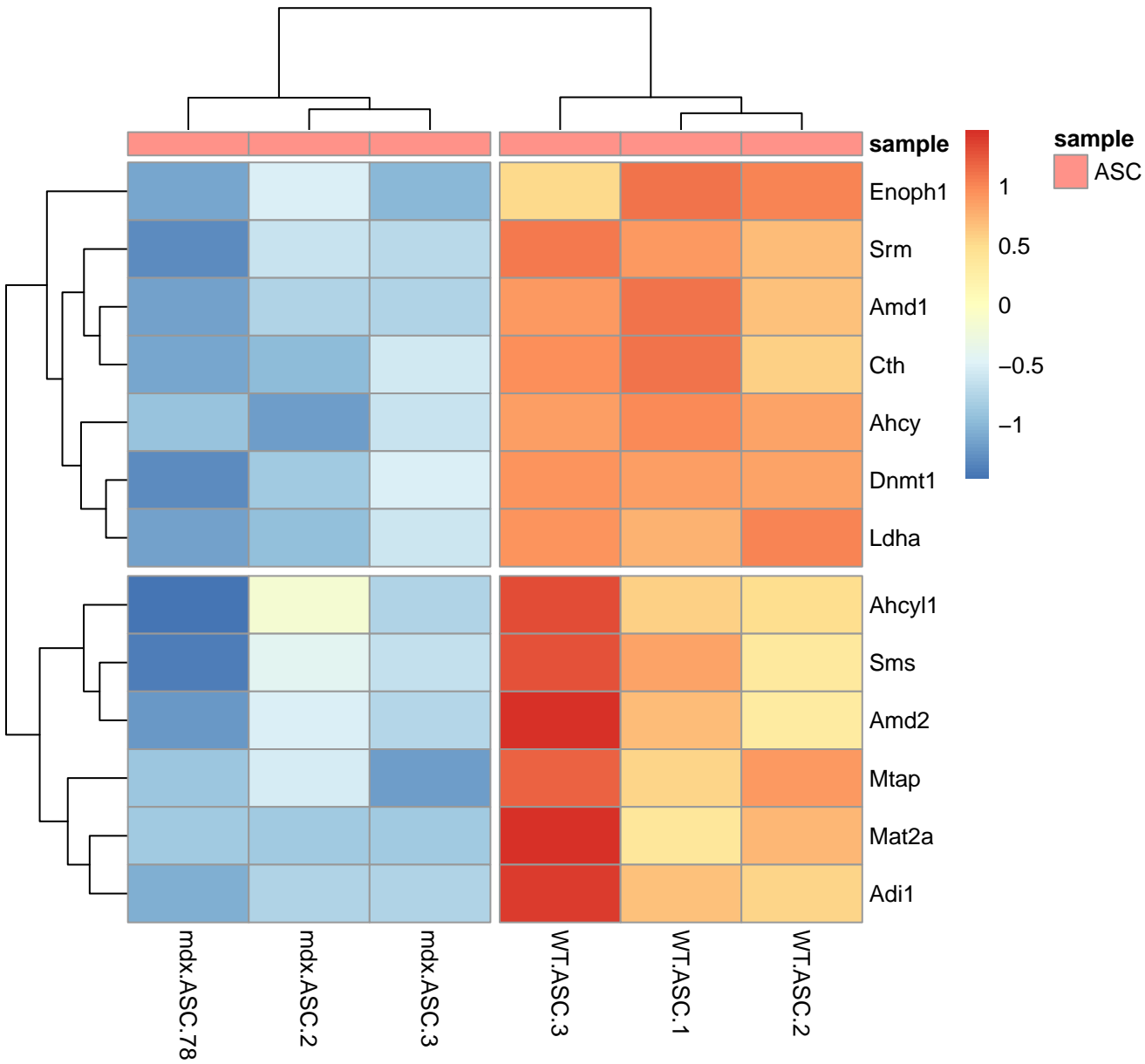**Scalling expressed matrix for genes active in KEGG_PYRIMIDINE_METABOLISM**

Expressed Matrix from Normalized for genes in KEGG_CYSTEINE_AND_METHIONINE_METABOLISM
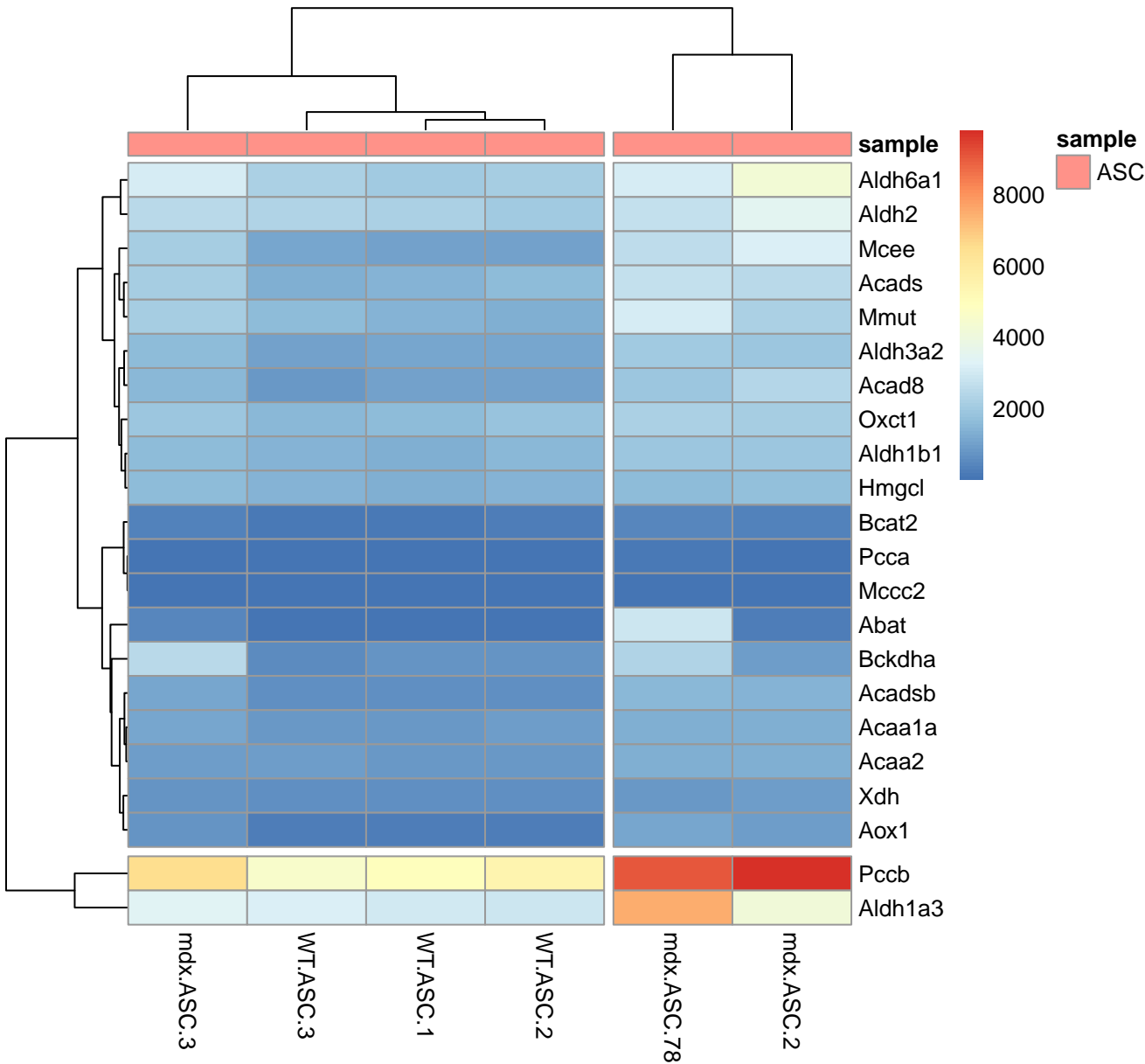
Expressed Matrix for genes active in
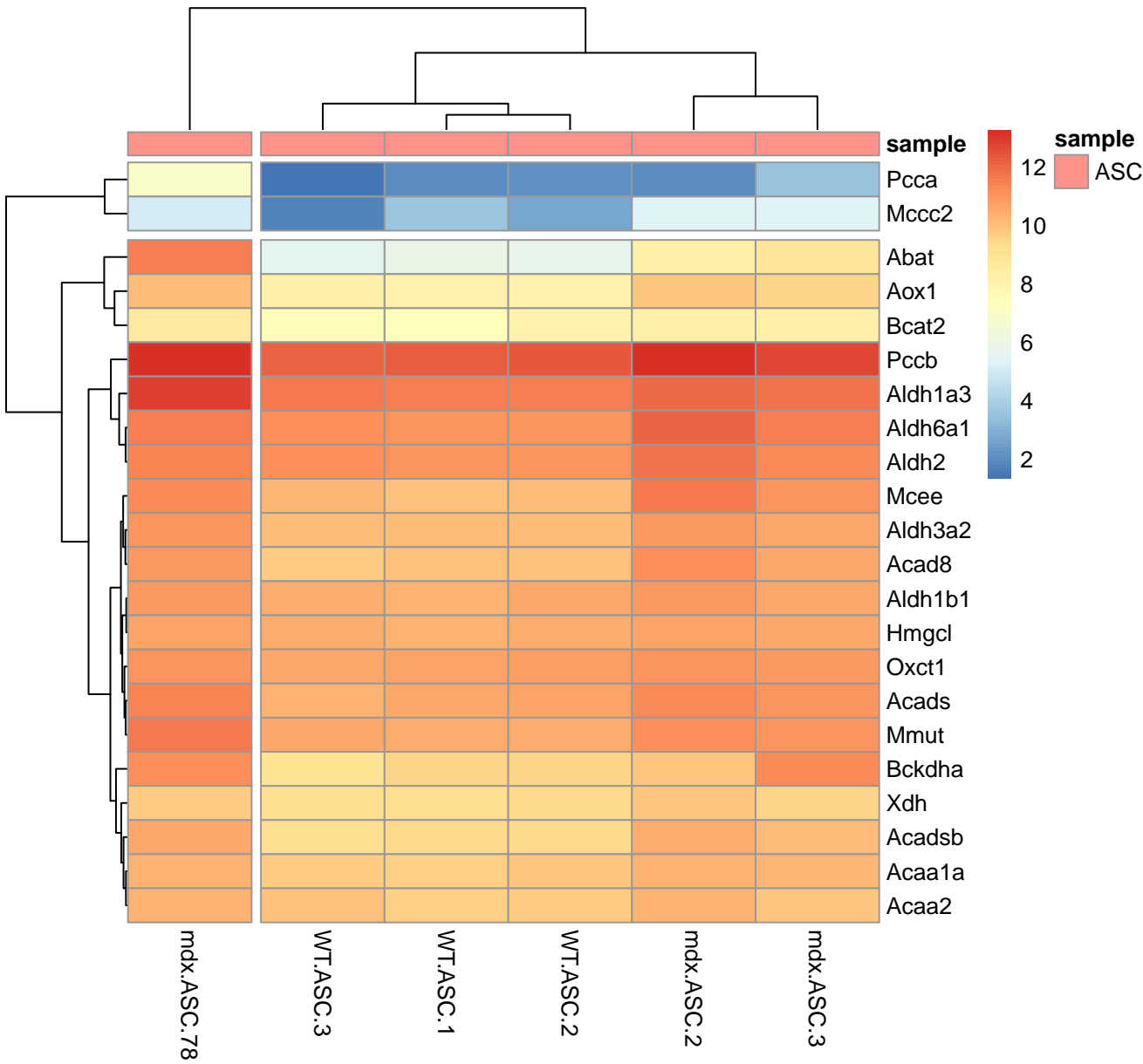# KEGG_CYSTEINE_AND_METHIONINE_METABOLISM

Scalling expressed matrix for genes active in
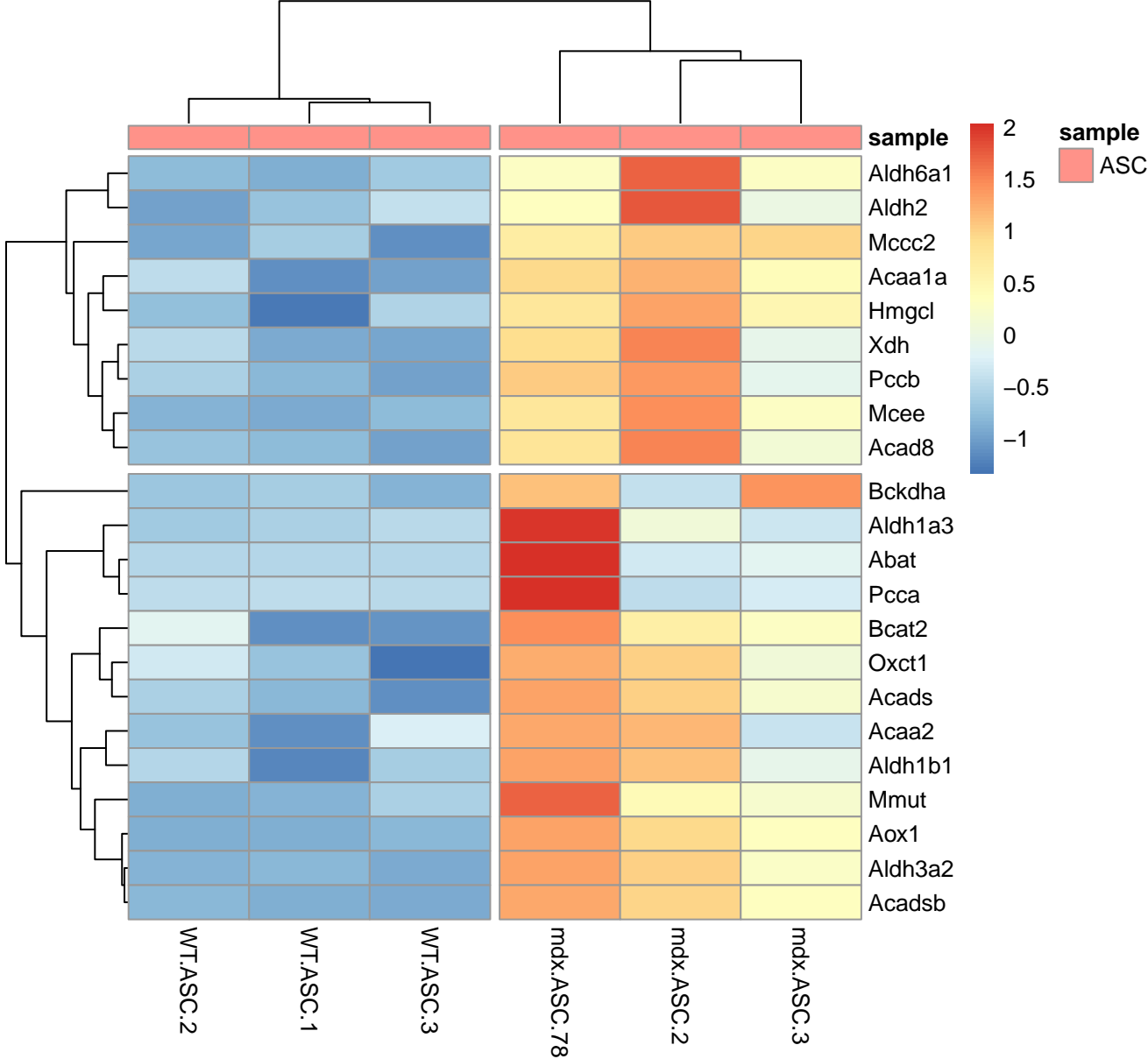# KEGG_CYSTEINE_AND_METHIONINE_METABOLISM

Expressed Matrix from Normalized for genes in KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION
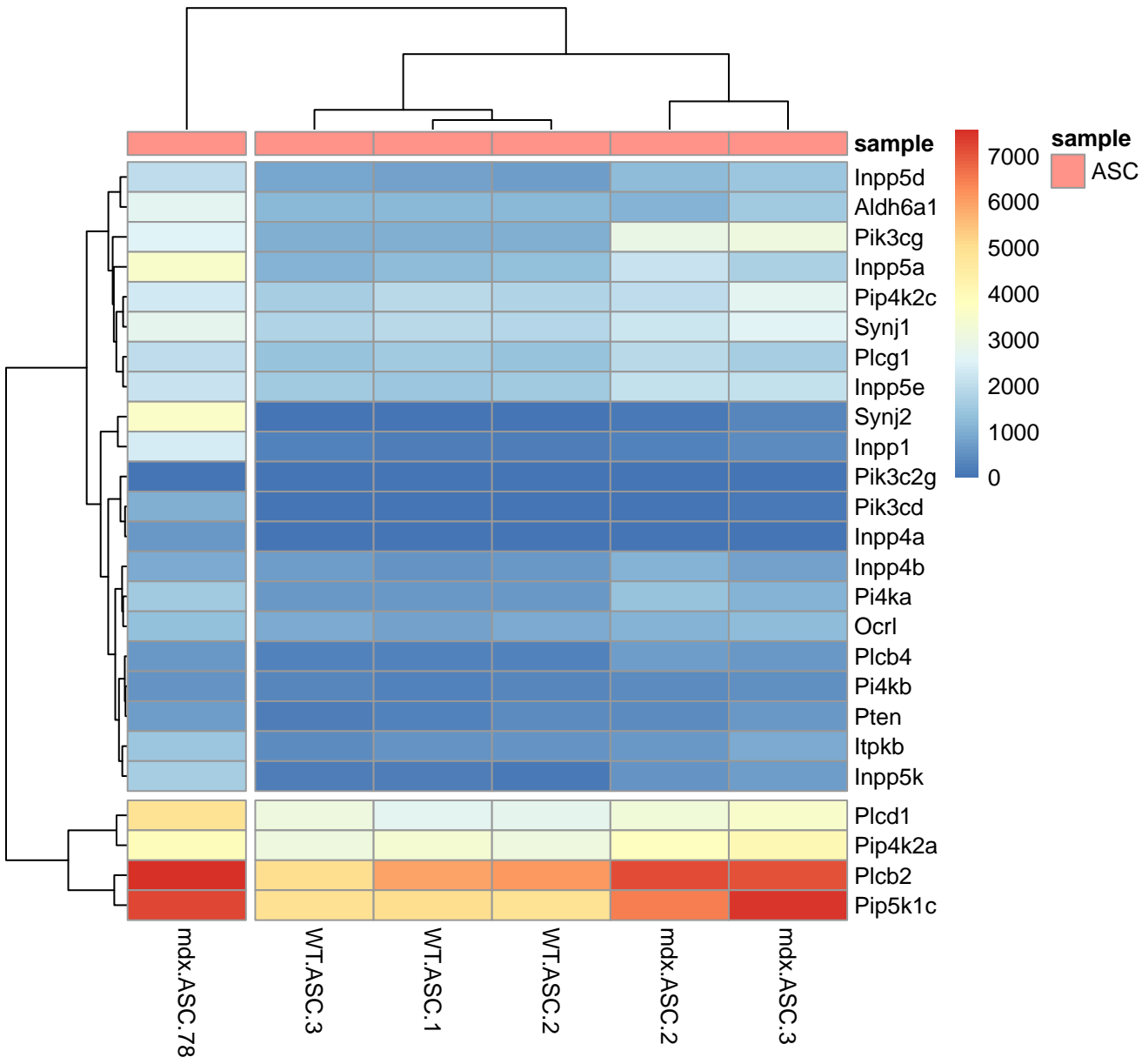
Expressed Matrix for genes active in
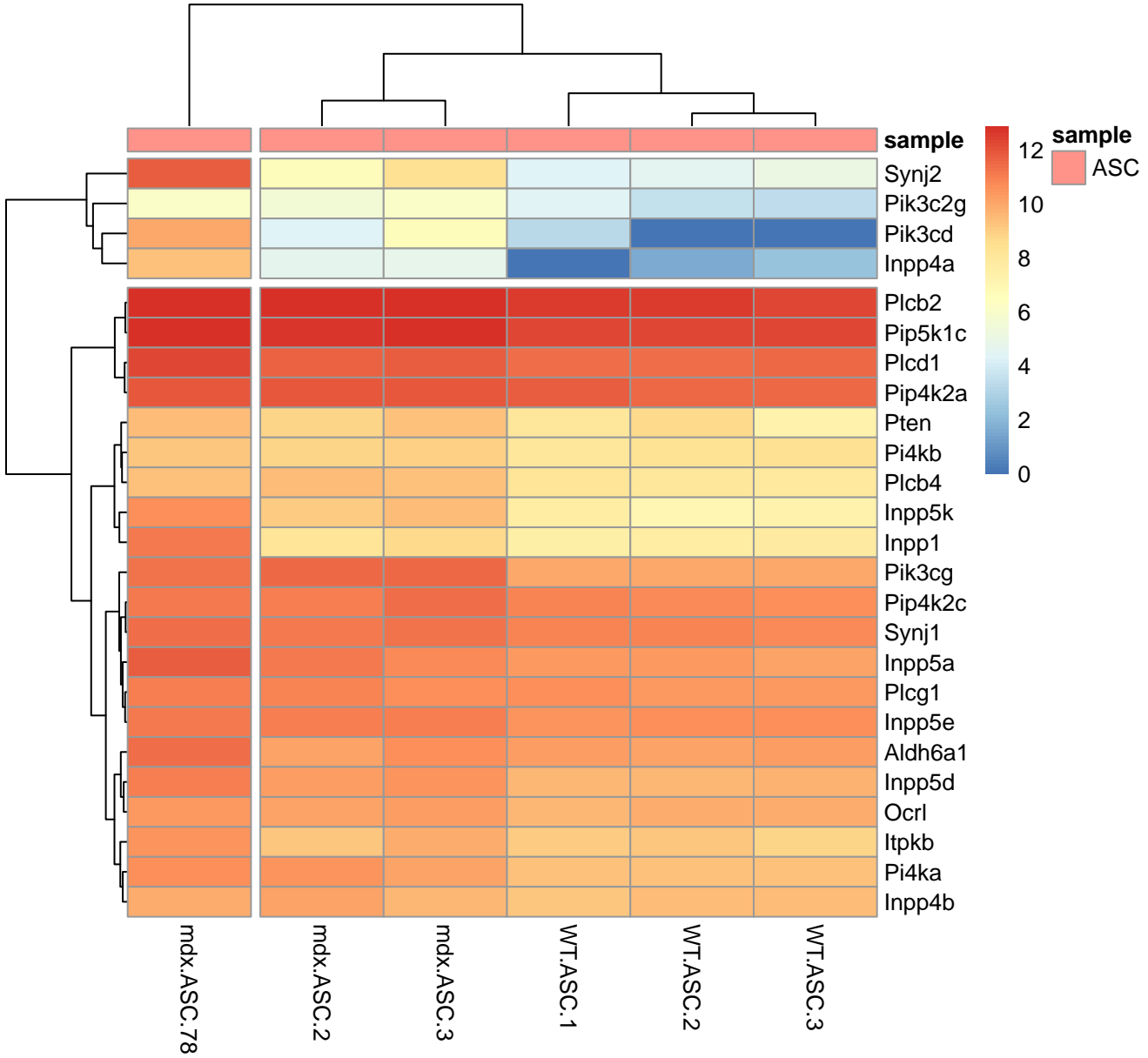# KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION

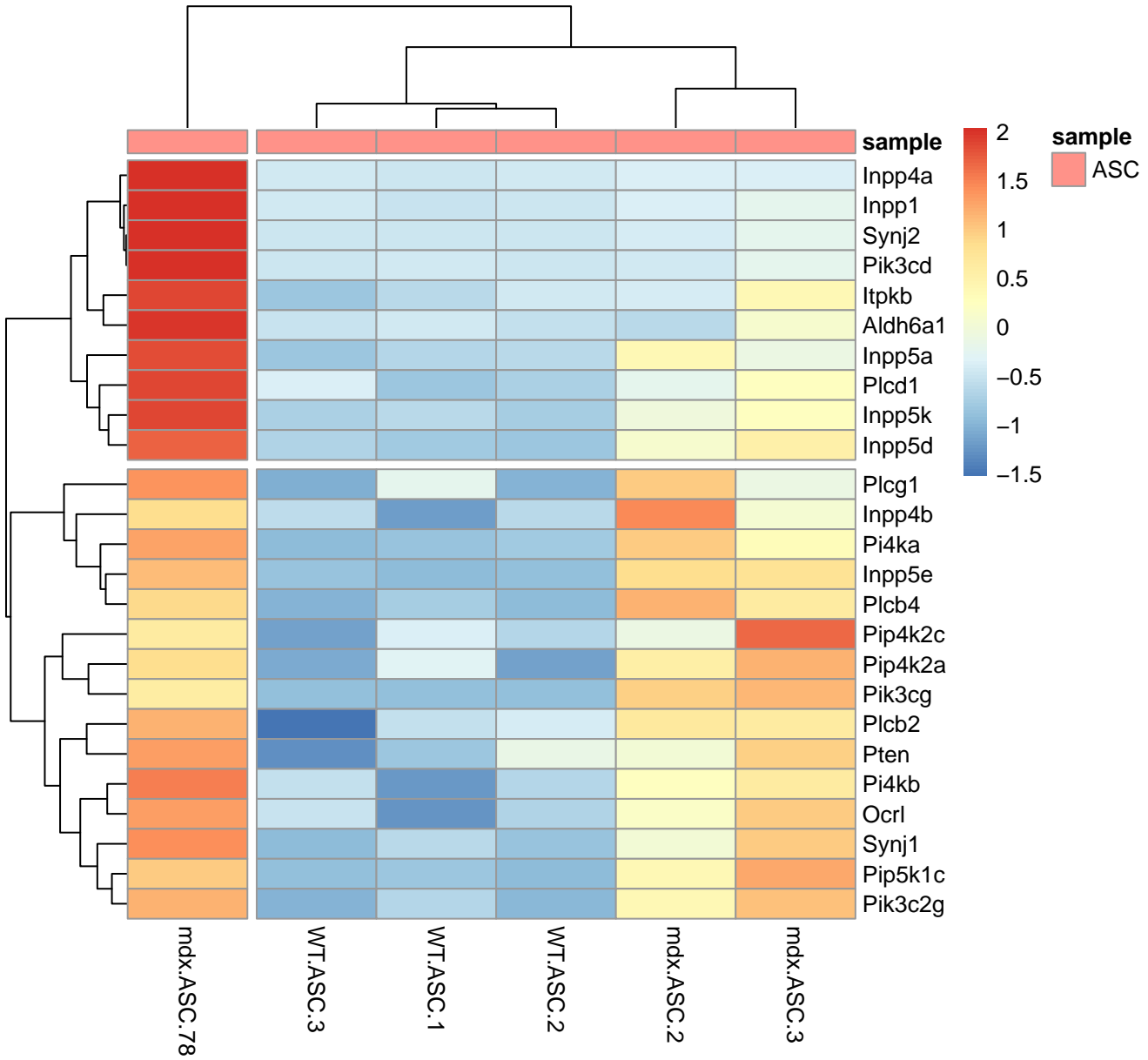**Scalling expressed matrix for genes active in KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION**

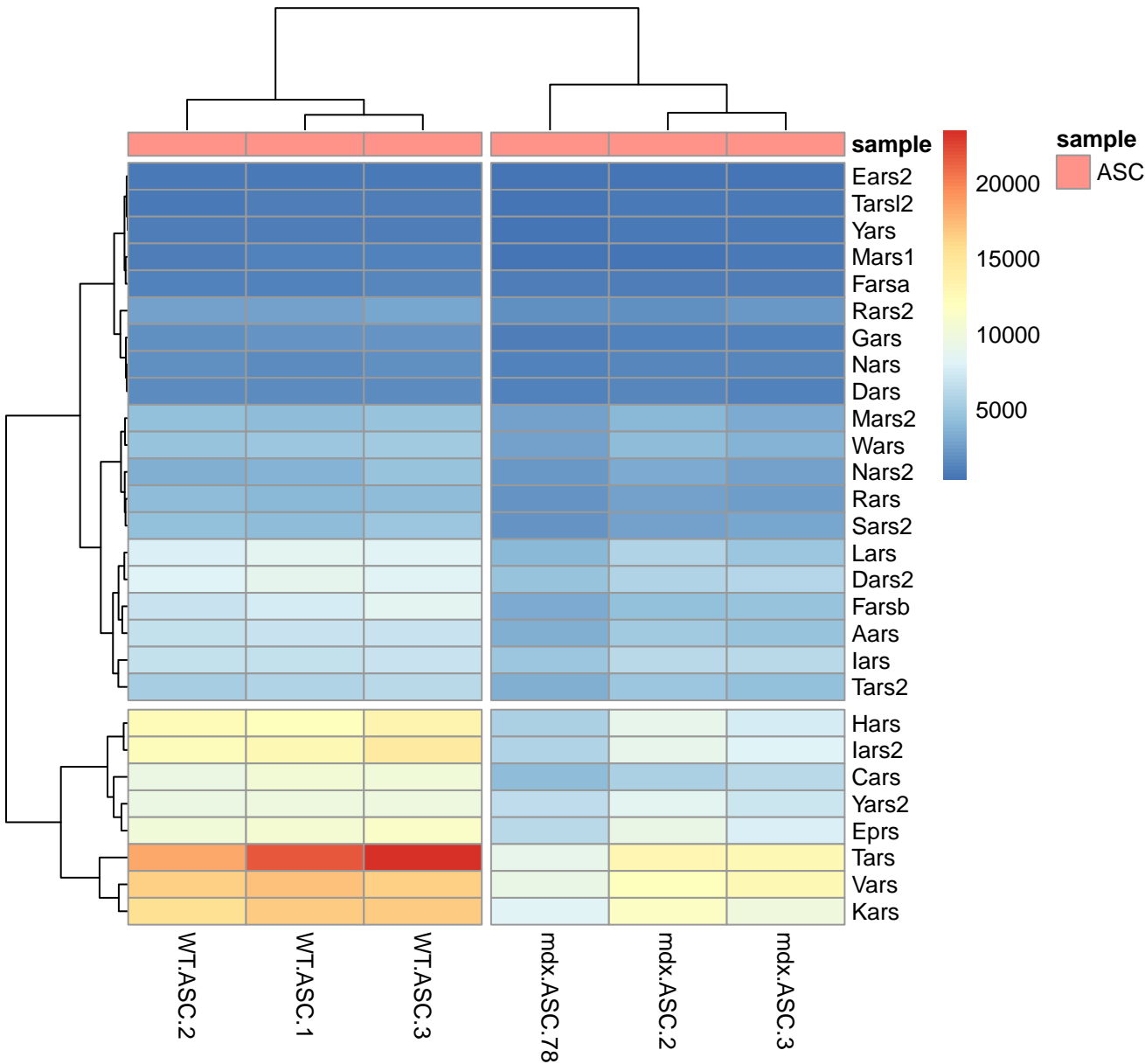**Expressed Matrix from Normalized for genes in KEGG_INOSITOL_PHOSPHATE_METABOLISM**

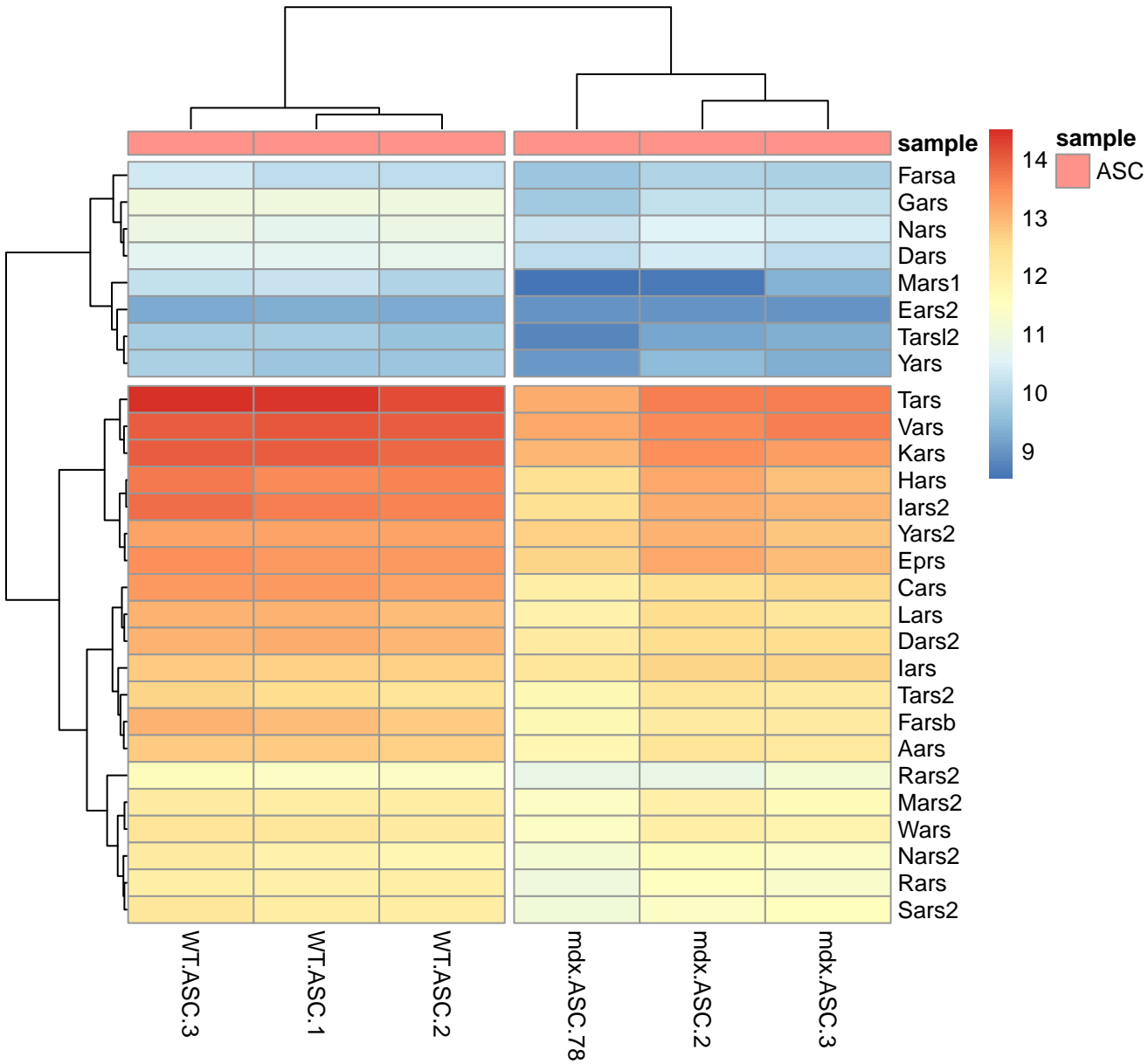**Expressed Matrix for genes active in KEGG_INOSITOL_PHOSPHATE_METABOLISM**

Scalling expressed matrix for genes active in KEGG_INOSITOL_PHOSPHATE_METABOLISM
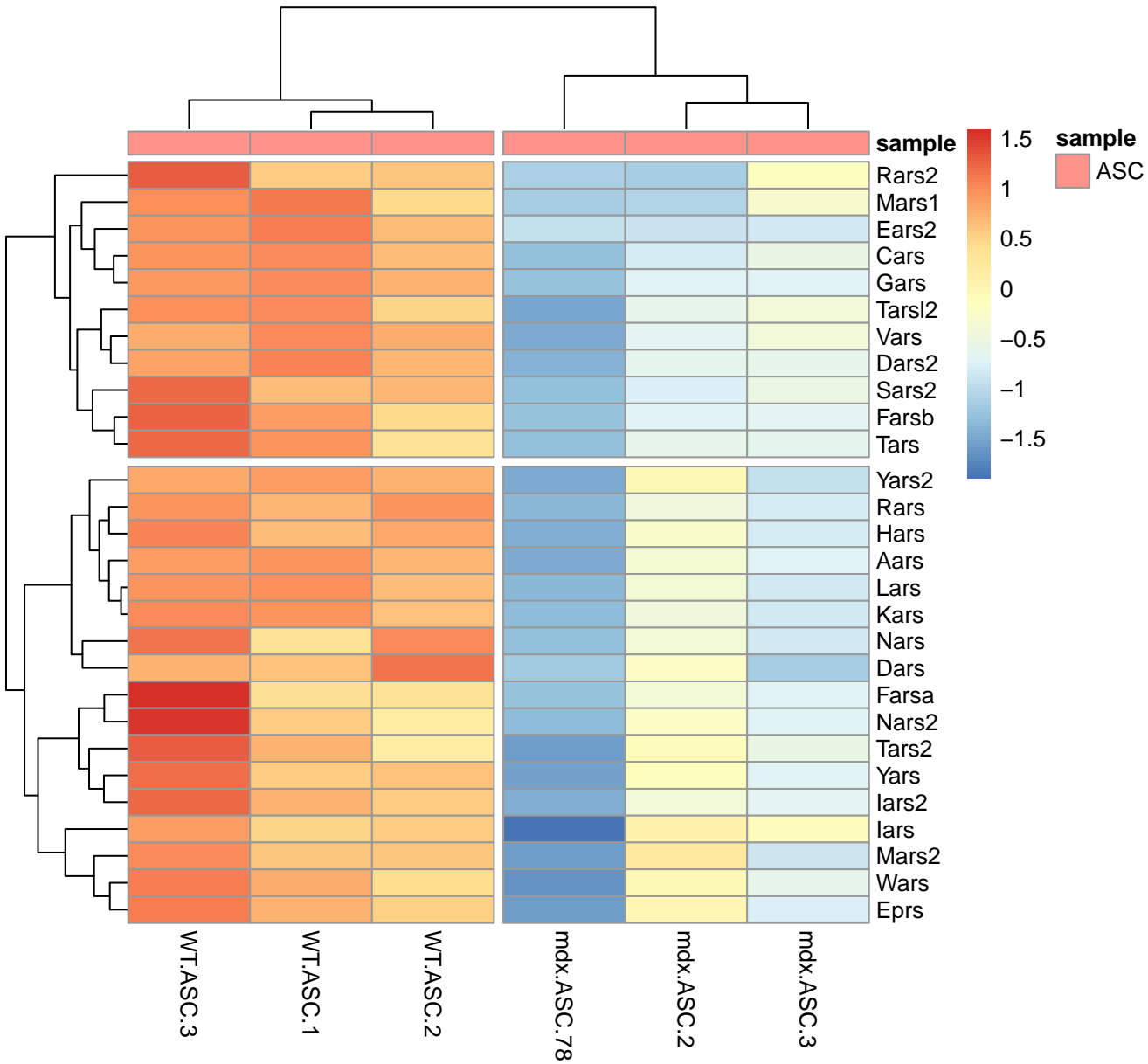
Expressed Matrix from Normalized for genes in KEGG_AMINOACYL_TRNA_BIOSYNTHESIS
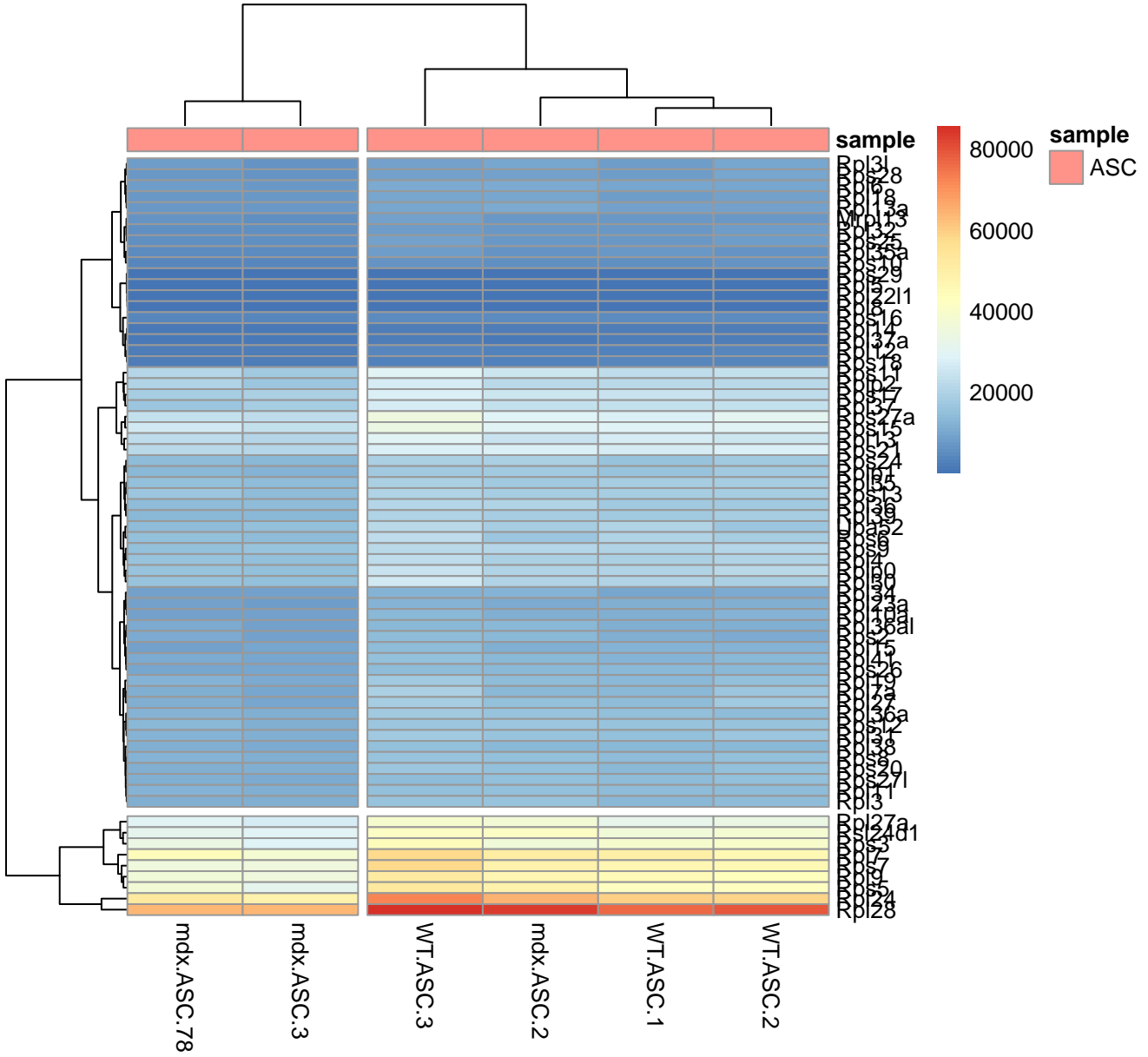
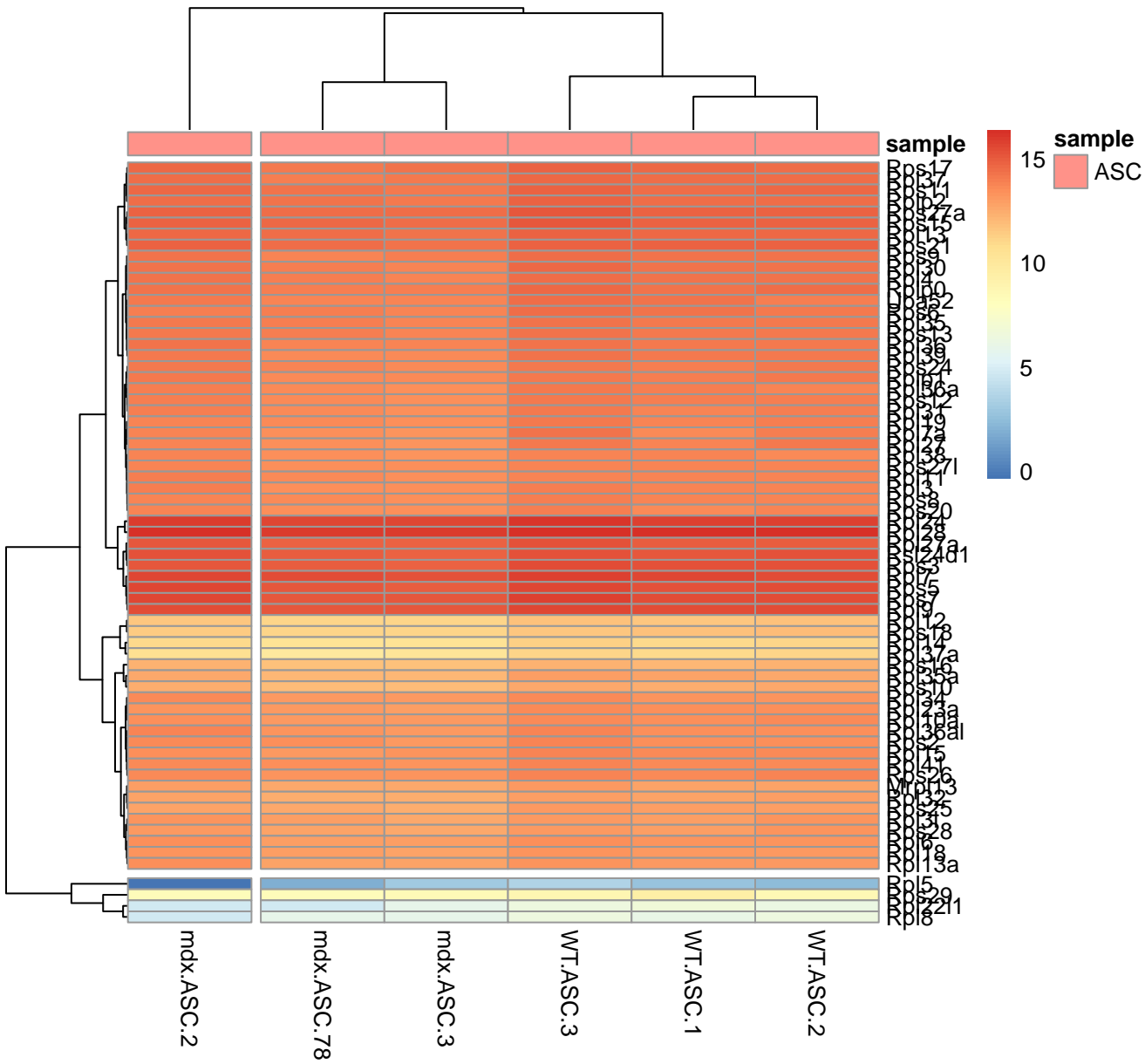**Expressed Matrix for genes active in KEGG_AMINOACYL_TRNA_BIOSYNTHESIS**

Scalling expressed matrix for genes active in KEGG_AMINOACYL_TRNA_BIOSYNTHESIS

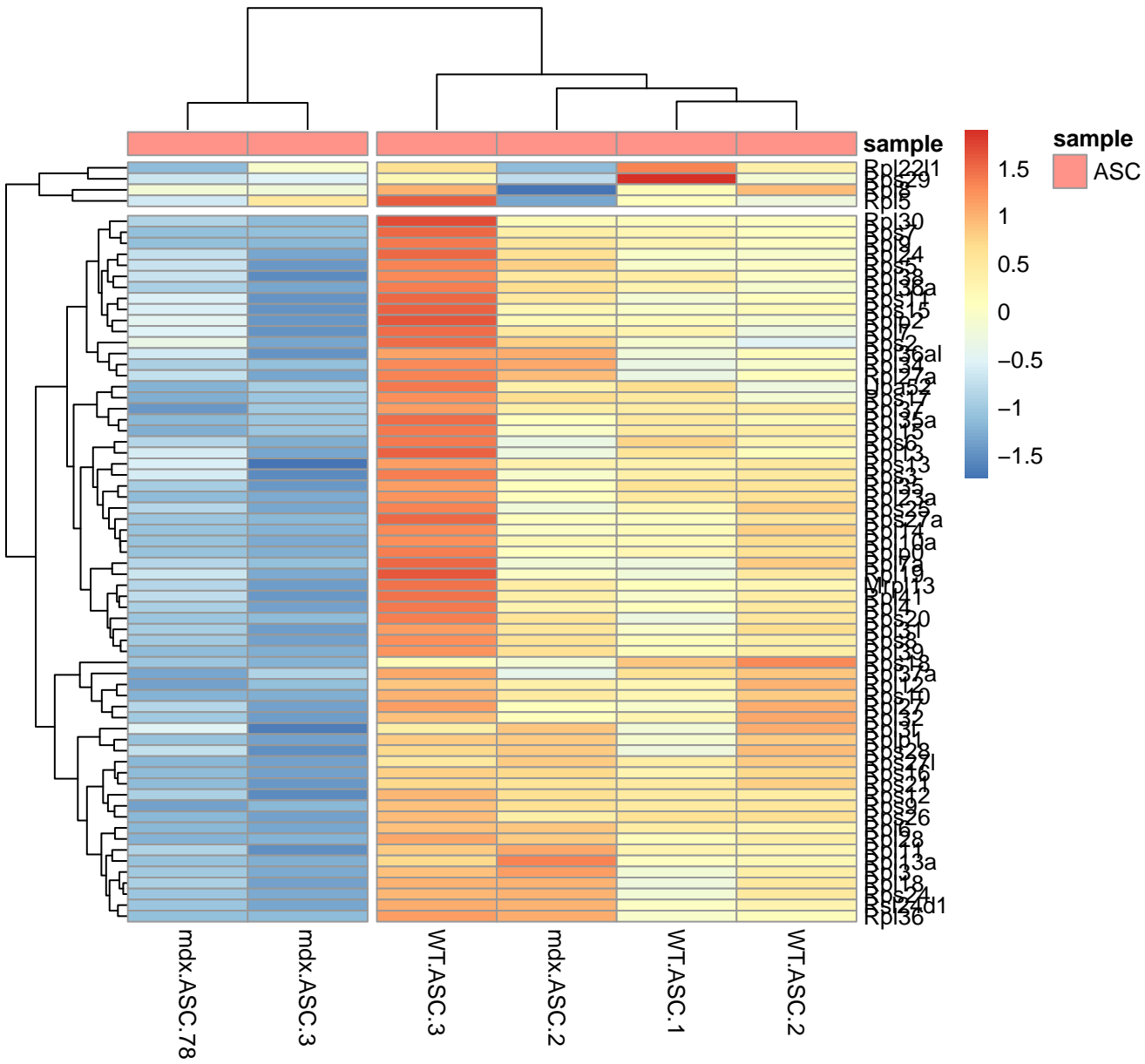**Expressed Matrix from Normalized for genes in KEGG_RIBOSOME**

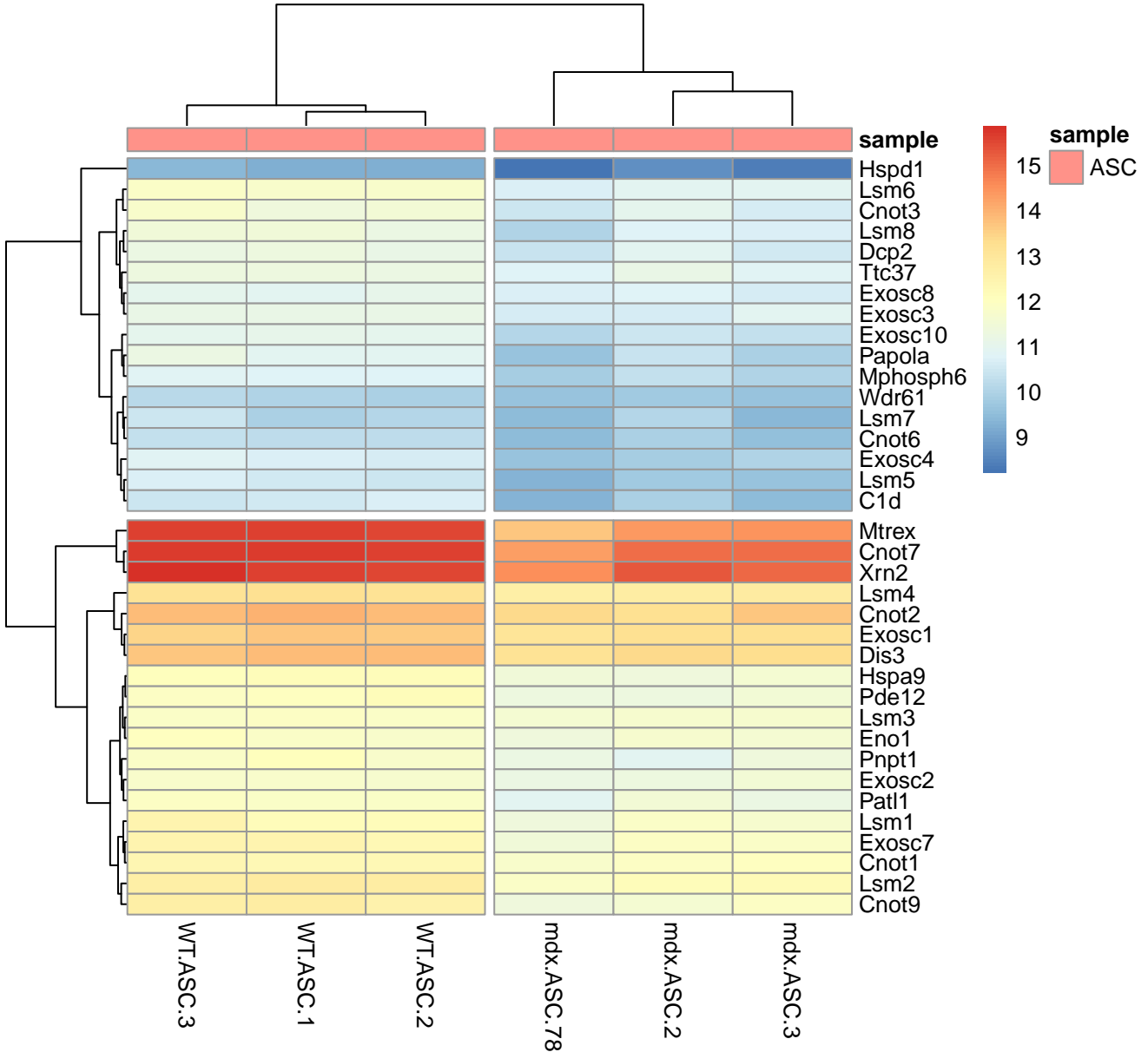**Expressed Matrix for genes active in KEGG_RIBOSOME**

Scalling expressed matrix for genes active in KEGG_RIBOSOME

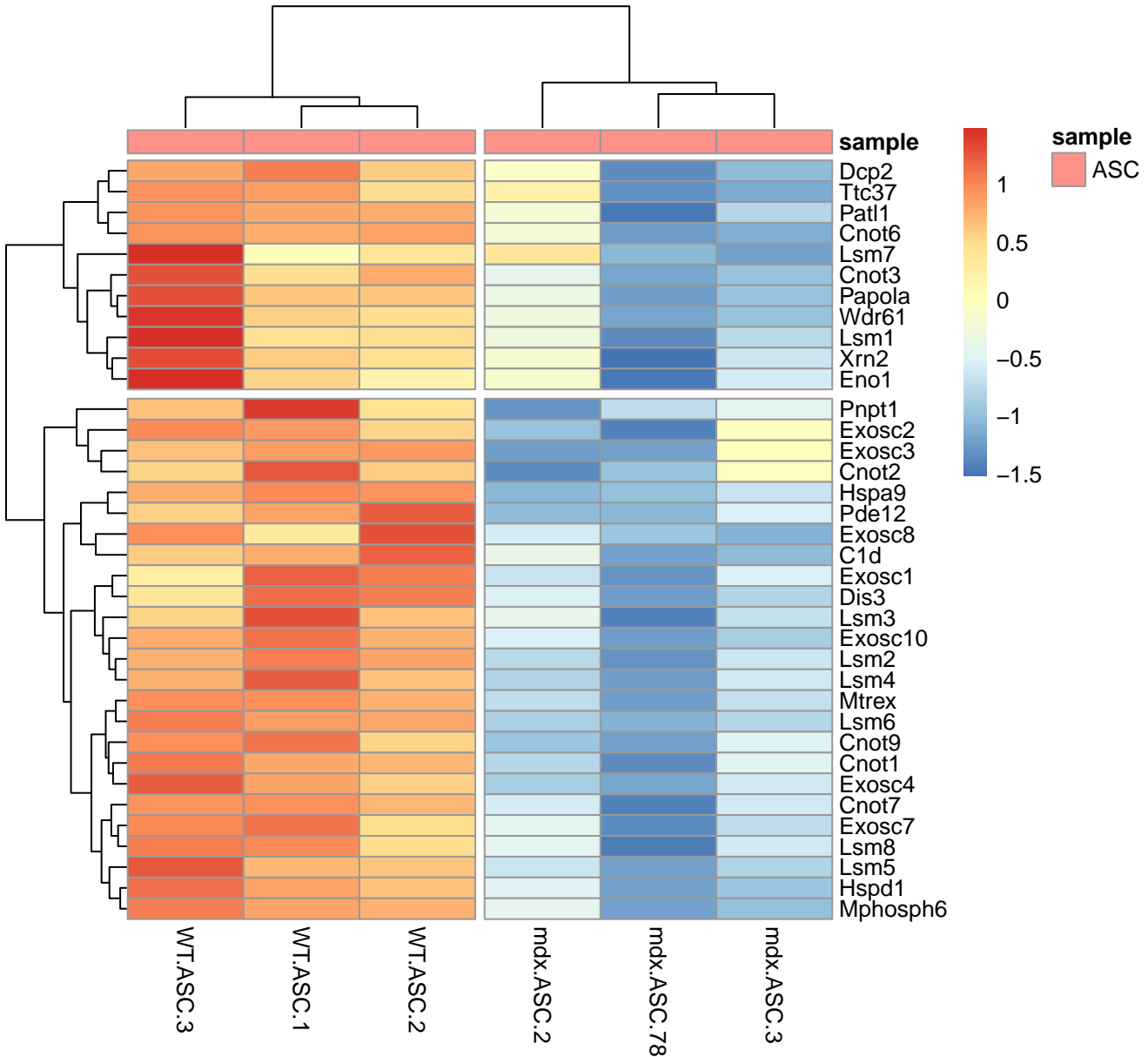# Expressed Matrix from Normalized for genes in
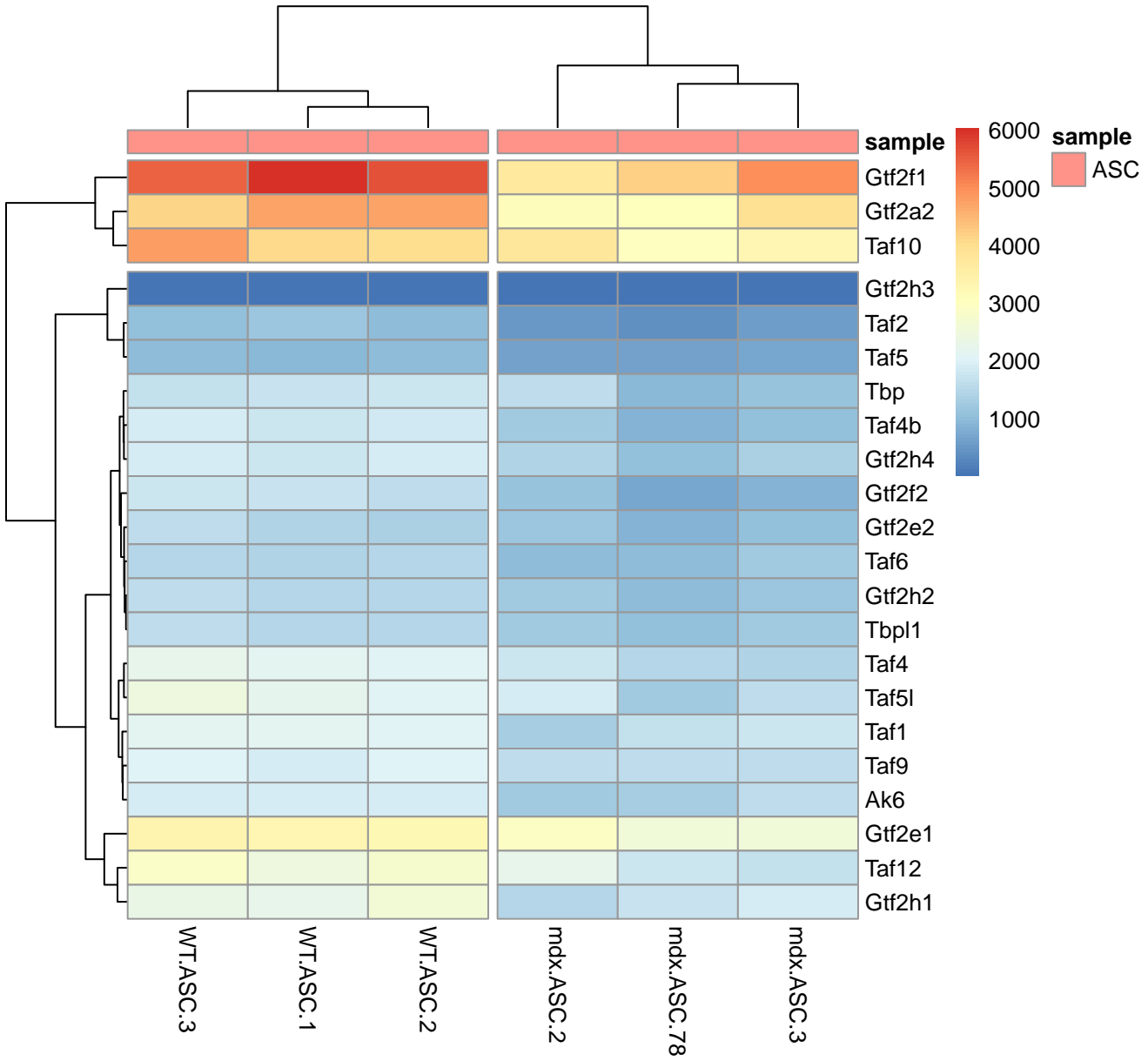# KEGG_RNA_DEGRADATION

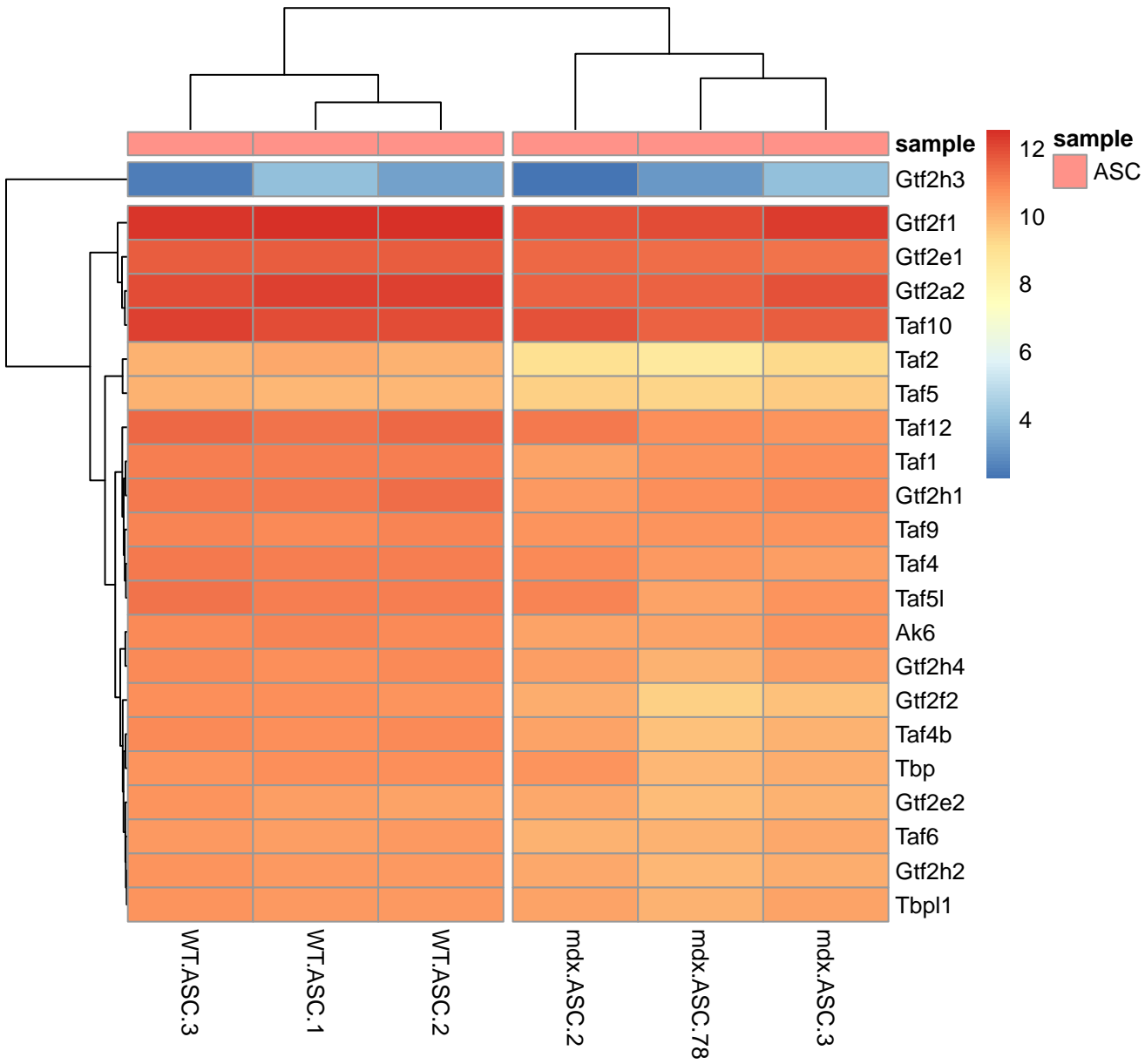# Expressed Matrix for genes active in
KEGG_RNA_DEGRADATION

Scalling expressed matrix for genes active in
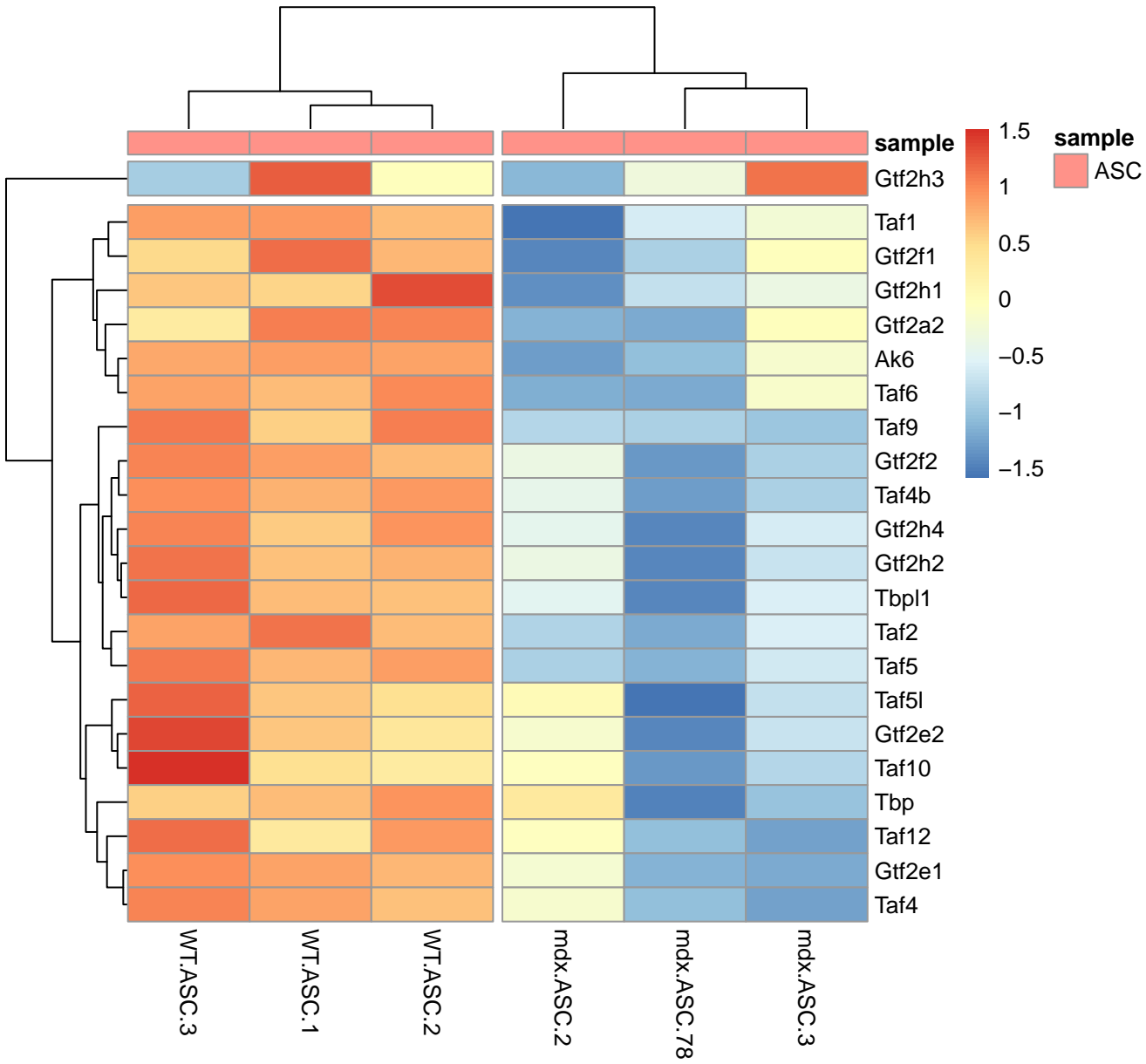## KEGG_RNA_DEGRADATION

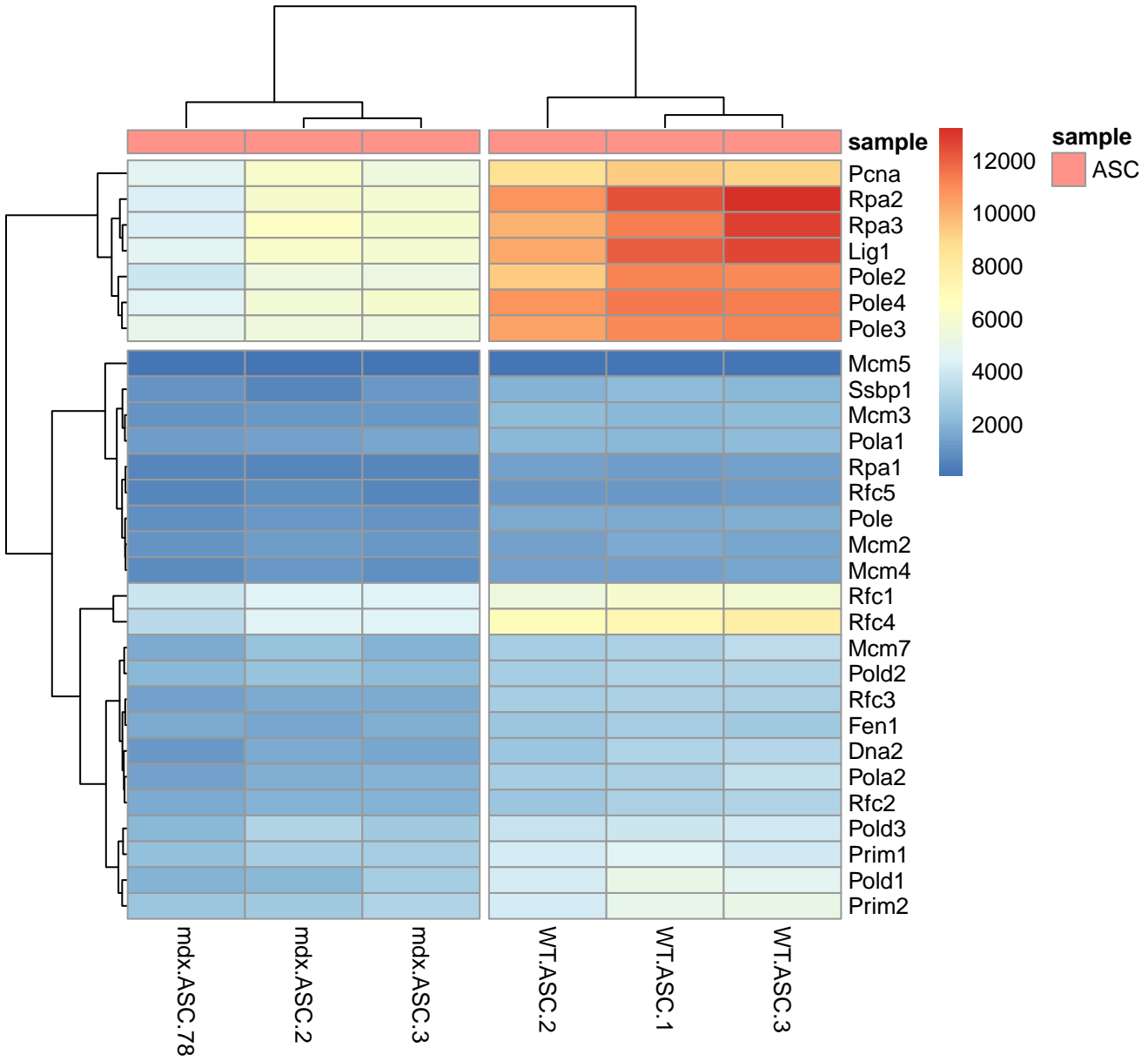# Expressed Matrix from Normalized for genes in KEGG_BASAL_TRANSCRIPTION_FACTORS

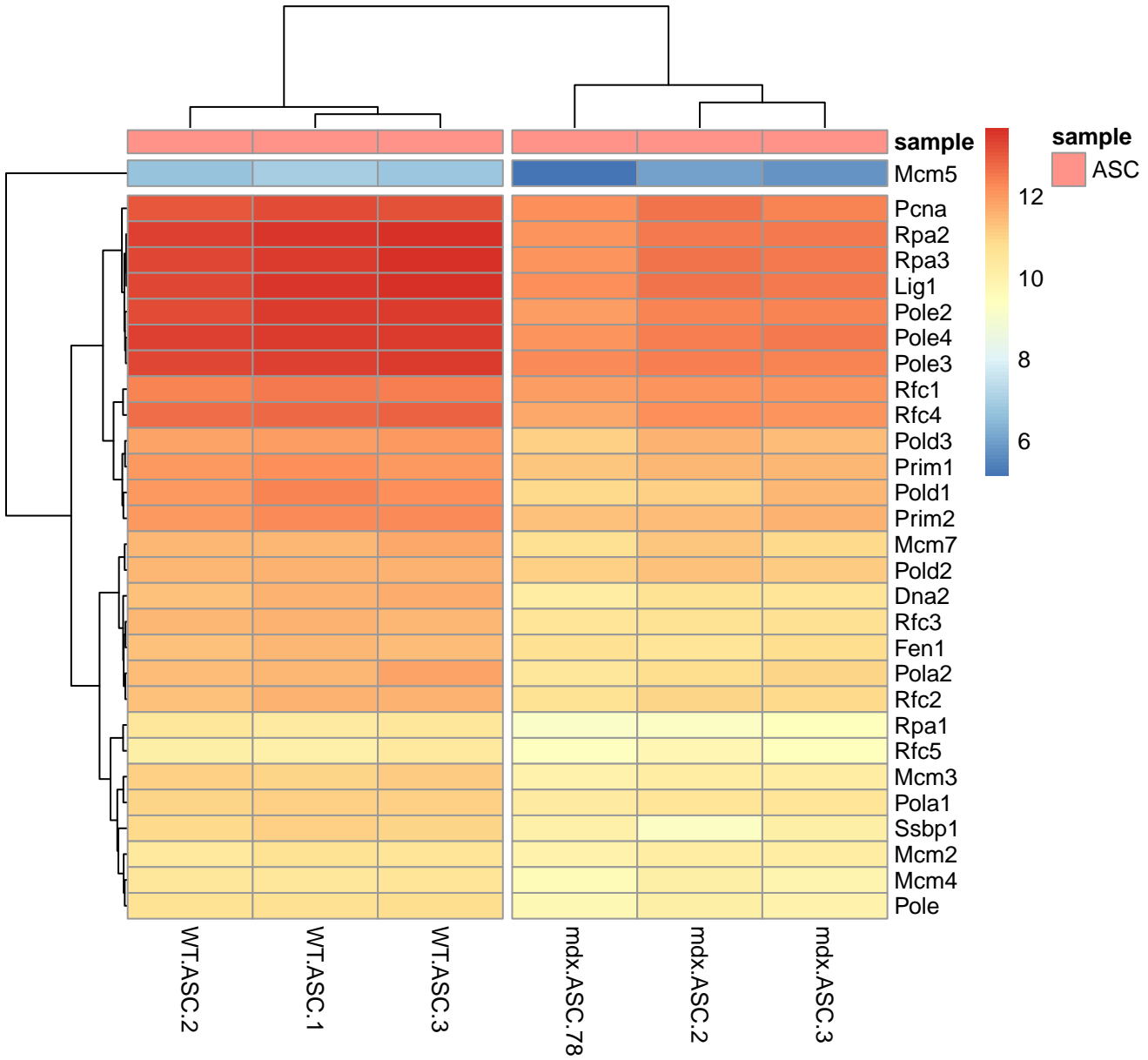**Expressed Matrix for genes active in KEGG_BASAL_TRANSCRIPTION_FACTORS**

Scalling expressed matrix for genes active in KEGG_BASAL_TRANSCRIPTION_FACTORS
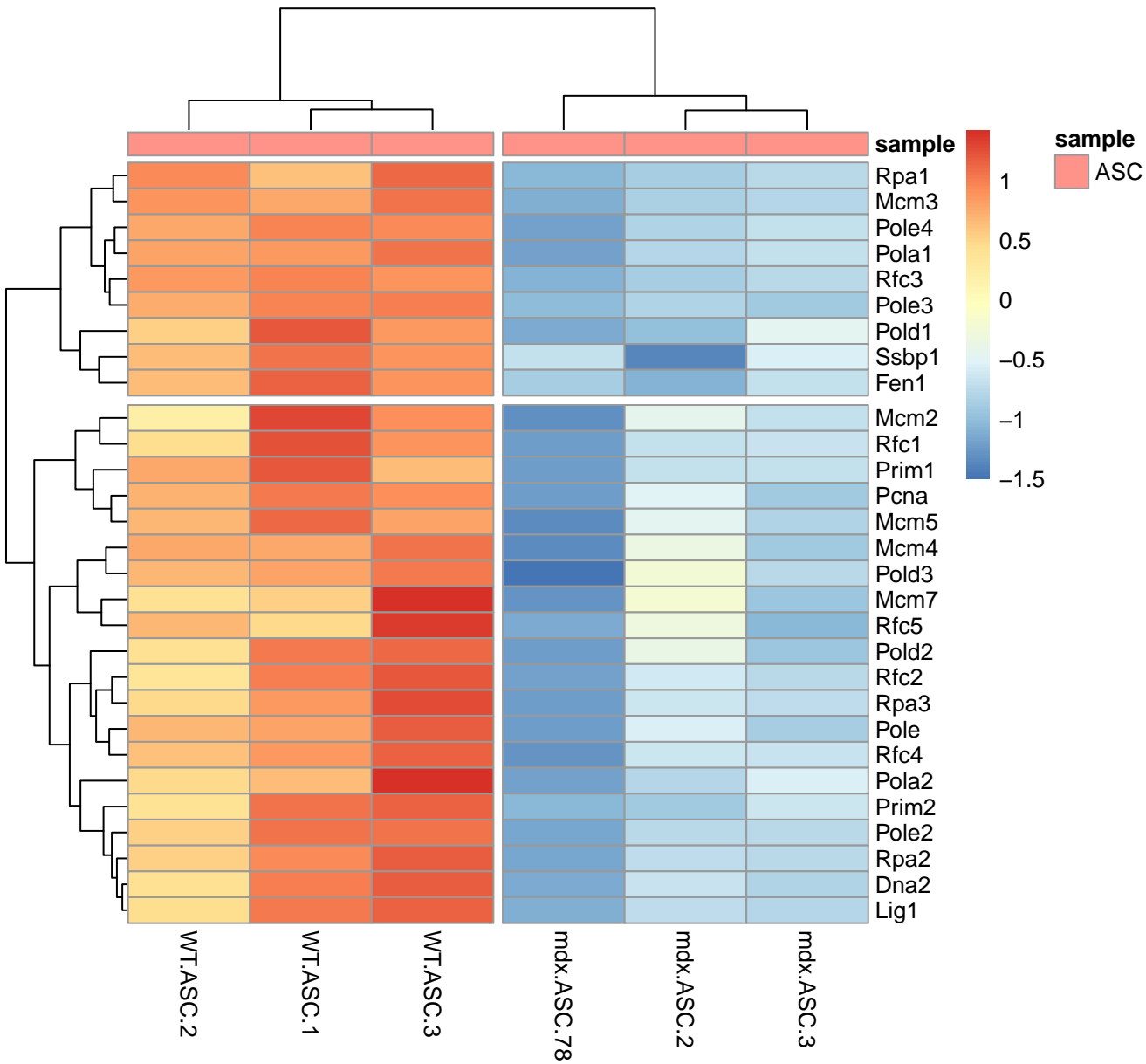
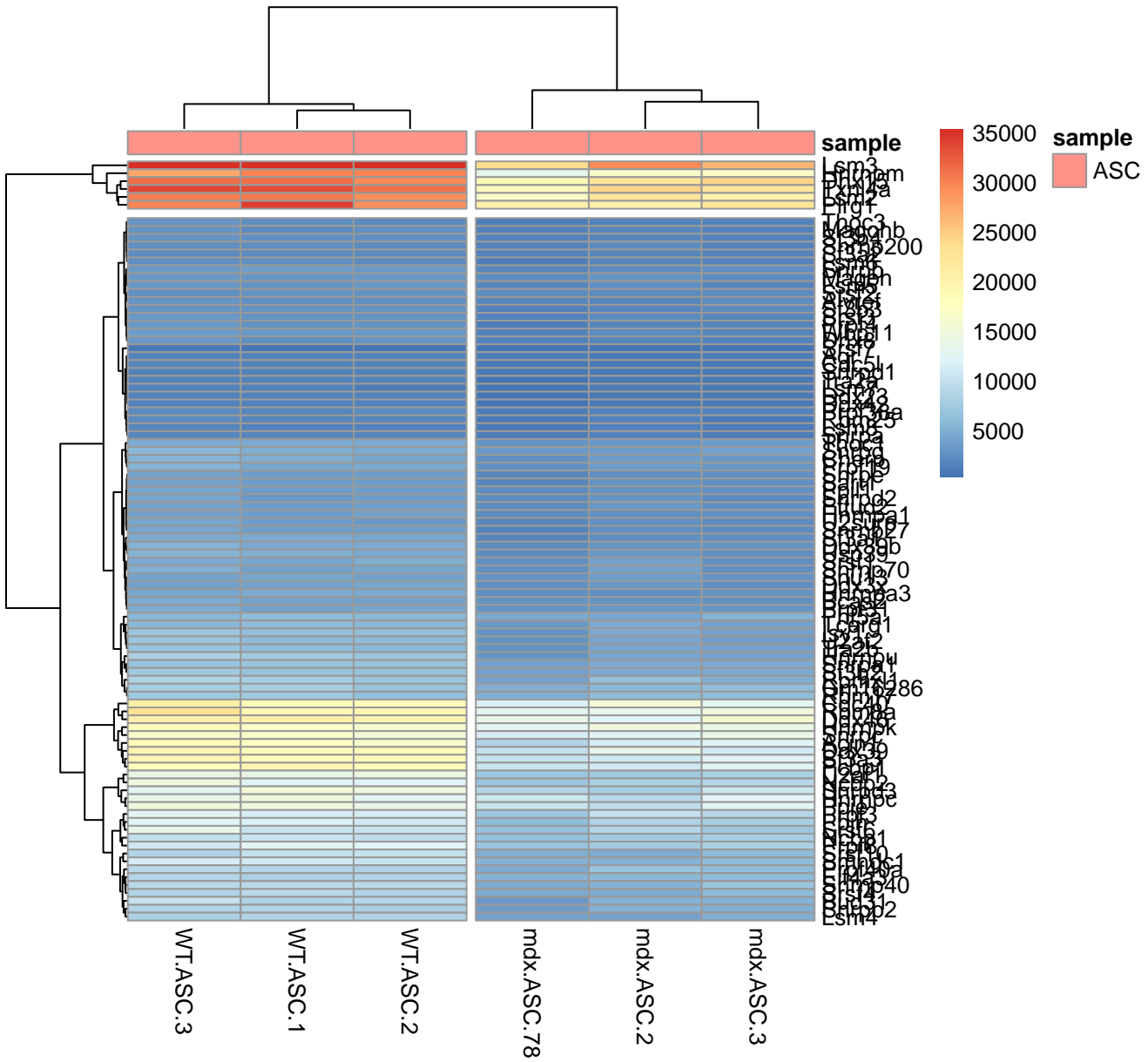**Expressed Matrix from Normalized for genes in KEGG_DNA_REPLICATION**

Expressed Matrix for genes active in KEGG_DNA_REPLICATION

Scalling expressed matrix for genes active in
KEGG_DNA_REPLICATION

Expressed Matrix from Normalized for genes in KEGG_SPLICEOSOME

Expressed Matrix for genes active in KEGG_SPLICEOSOME

Scalling expressed matrix for genes active in
KEGG_SPLICEOSOME

Expressed Matrix from Normalized for genes in KEGG_PROTEASOME
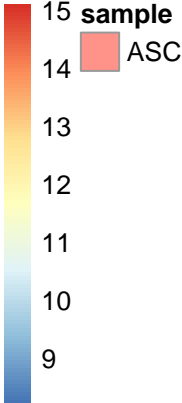
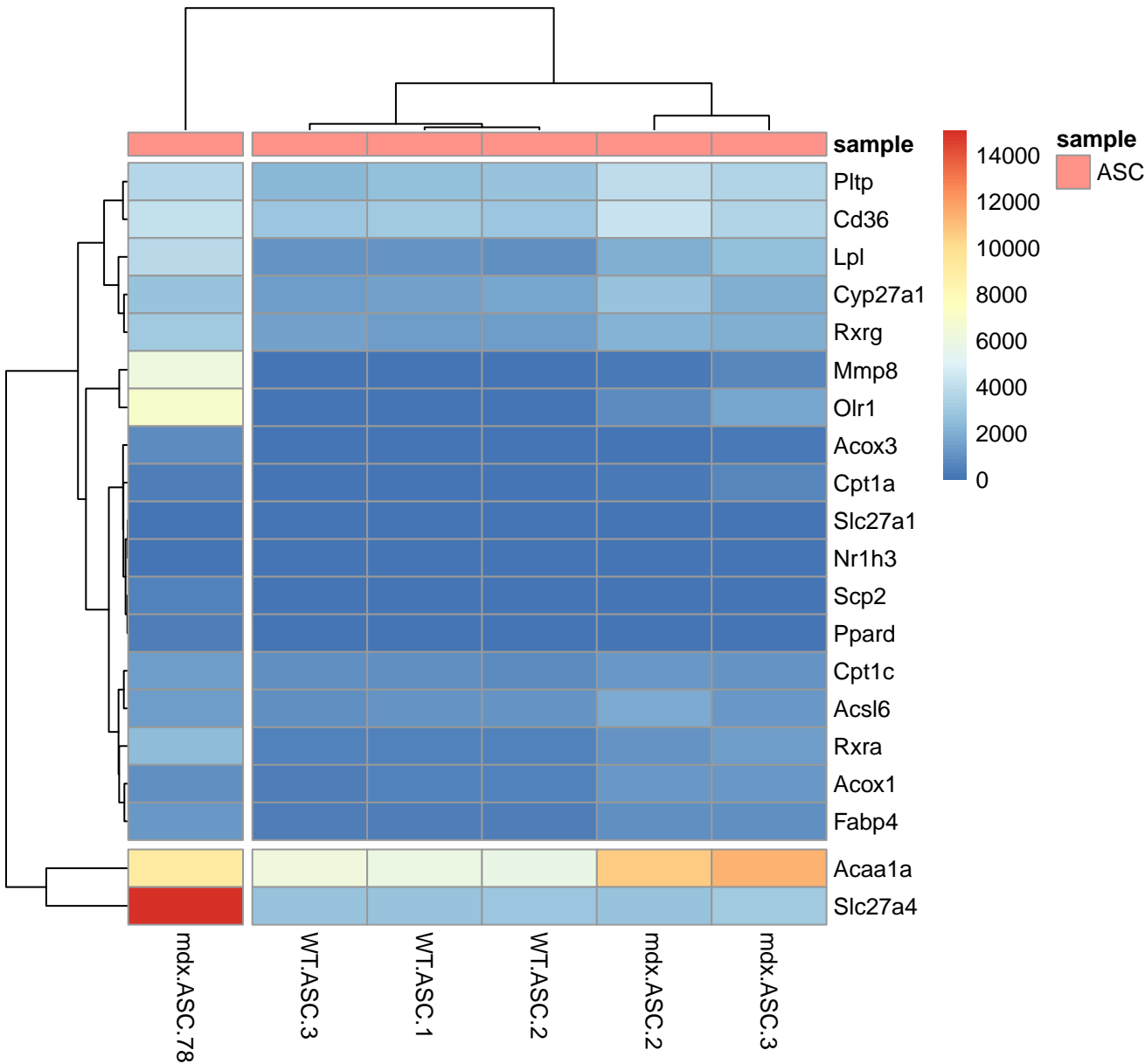# Expressed Matrix for genes active in
KEGG_PROTEASOME
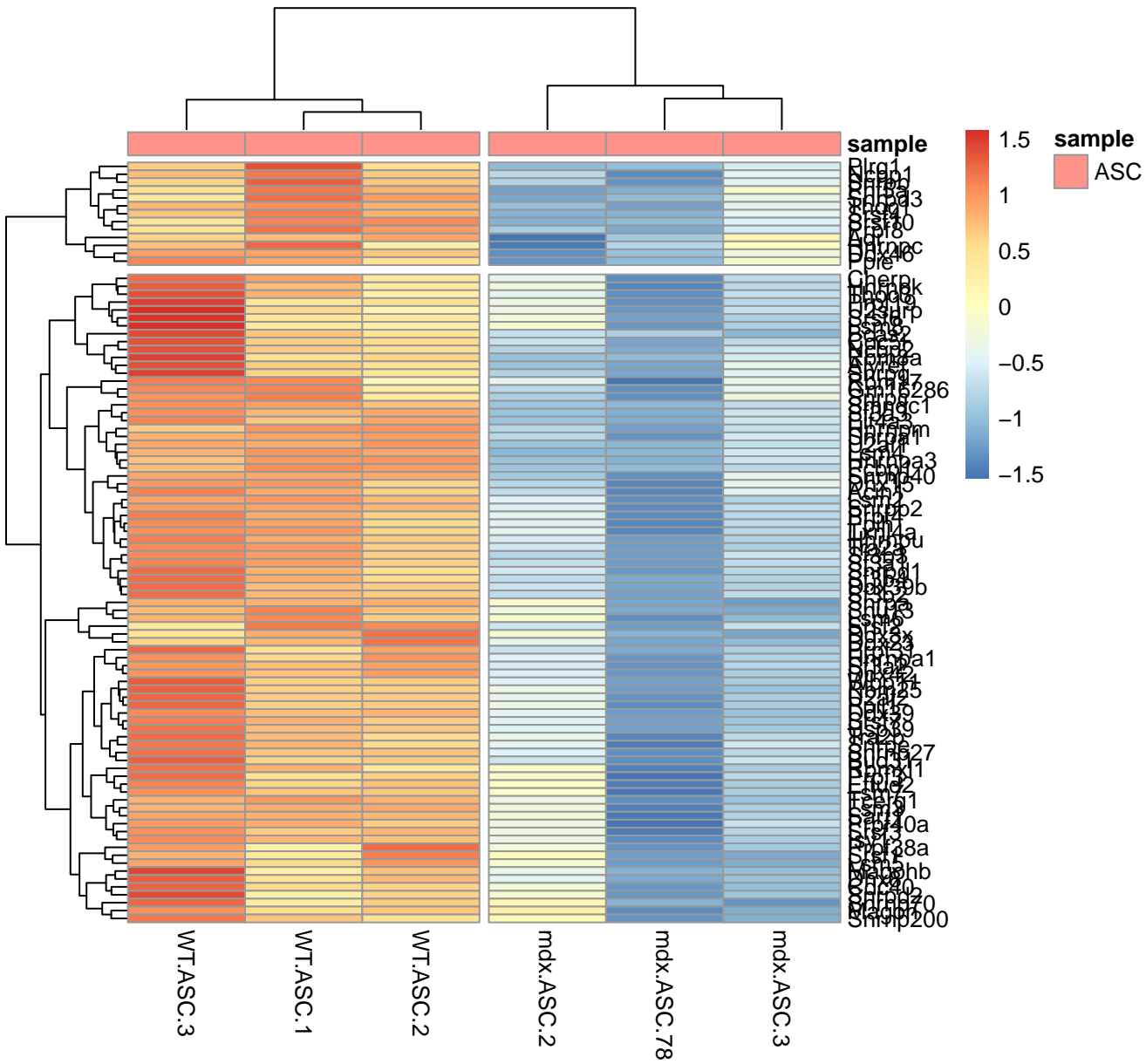
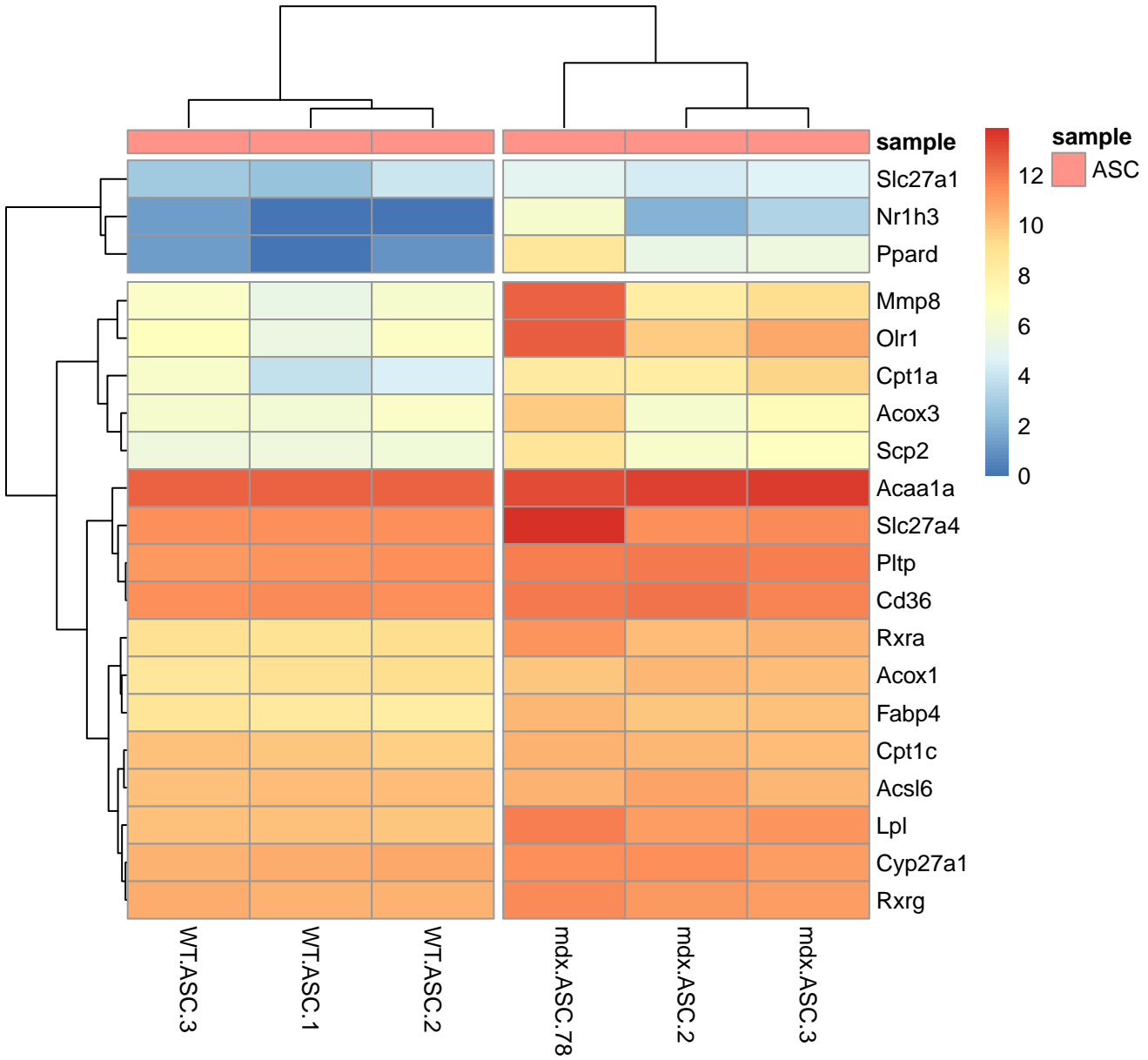**Scalling expressed matrix for genes active in KEGG_PROTEASOME**
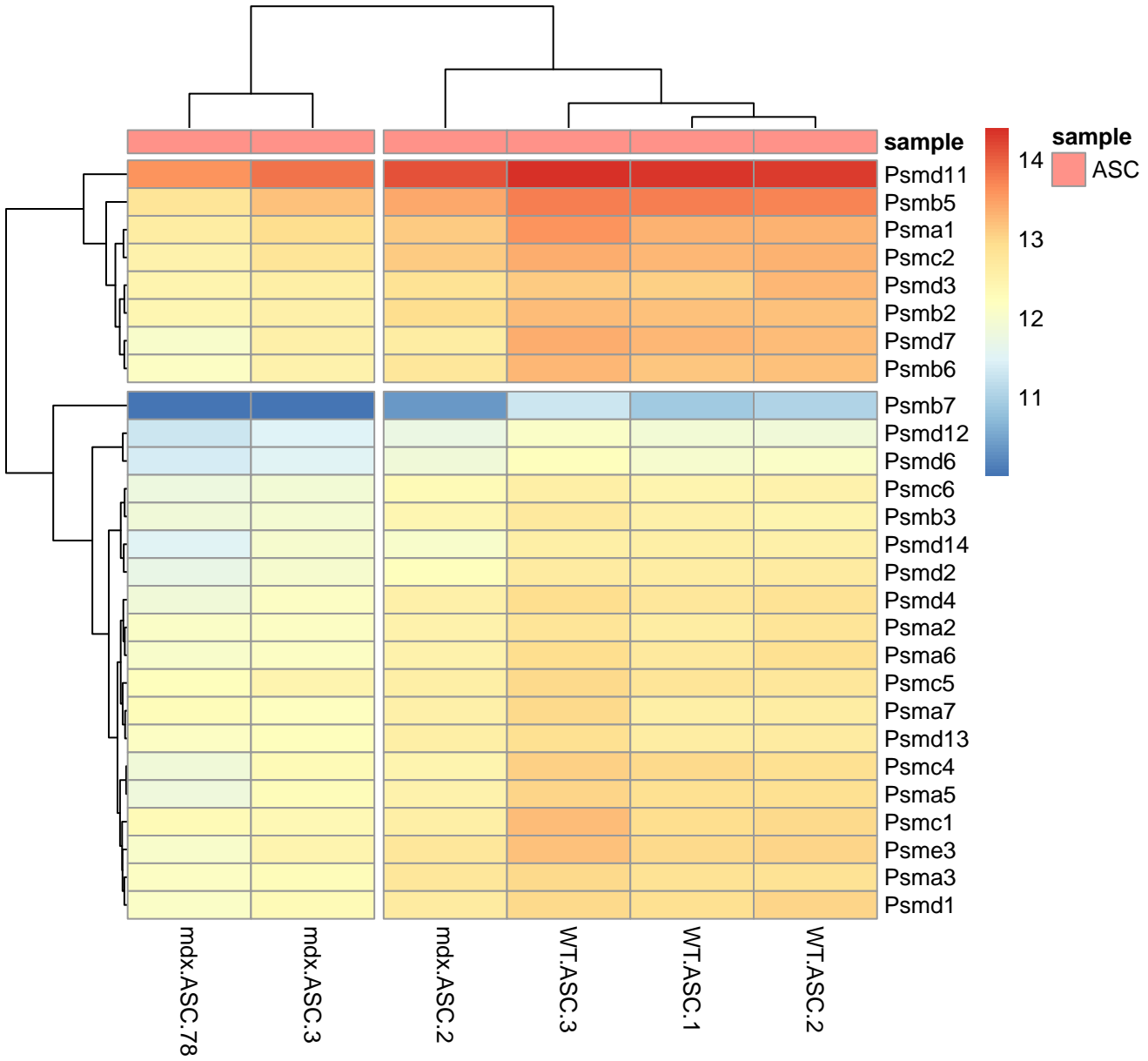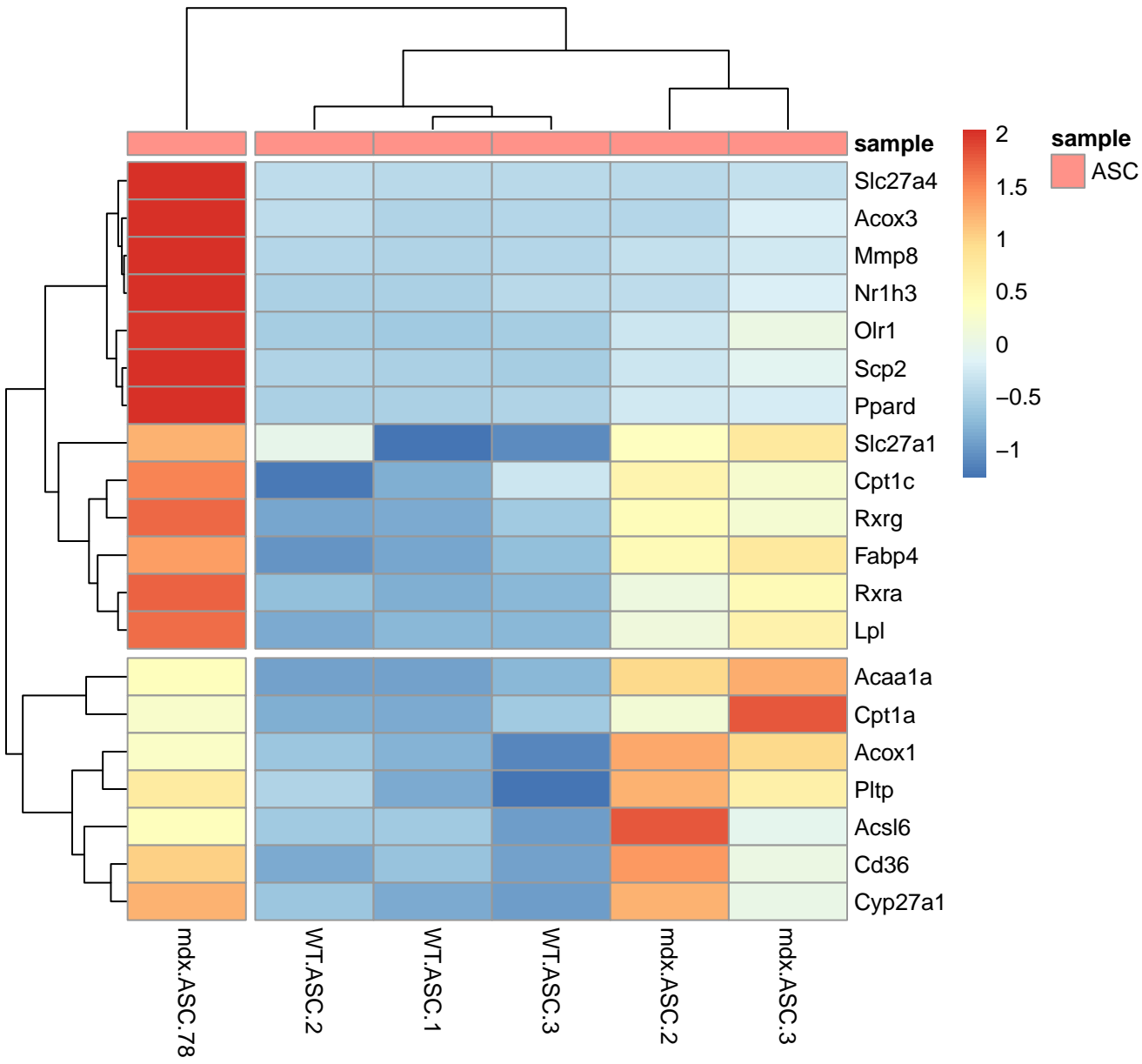
Expressed Matrix from Normalized for genes in
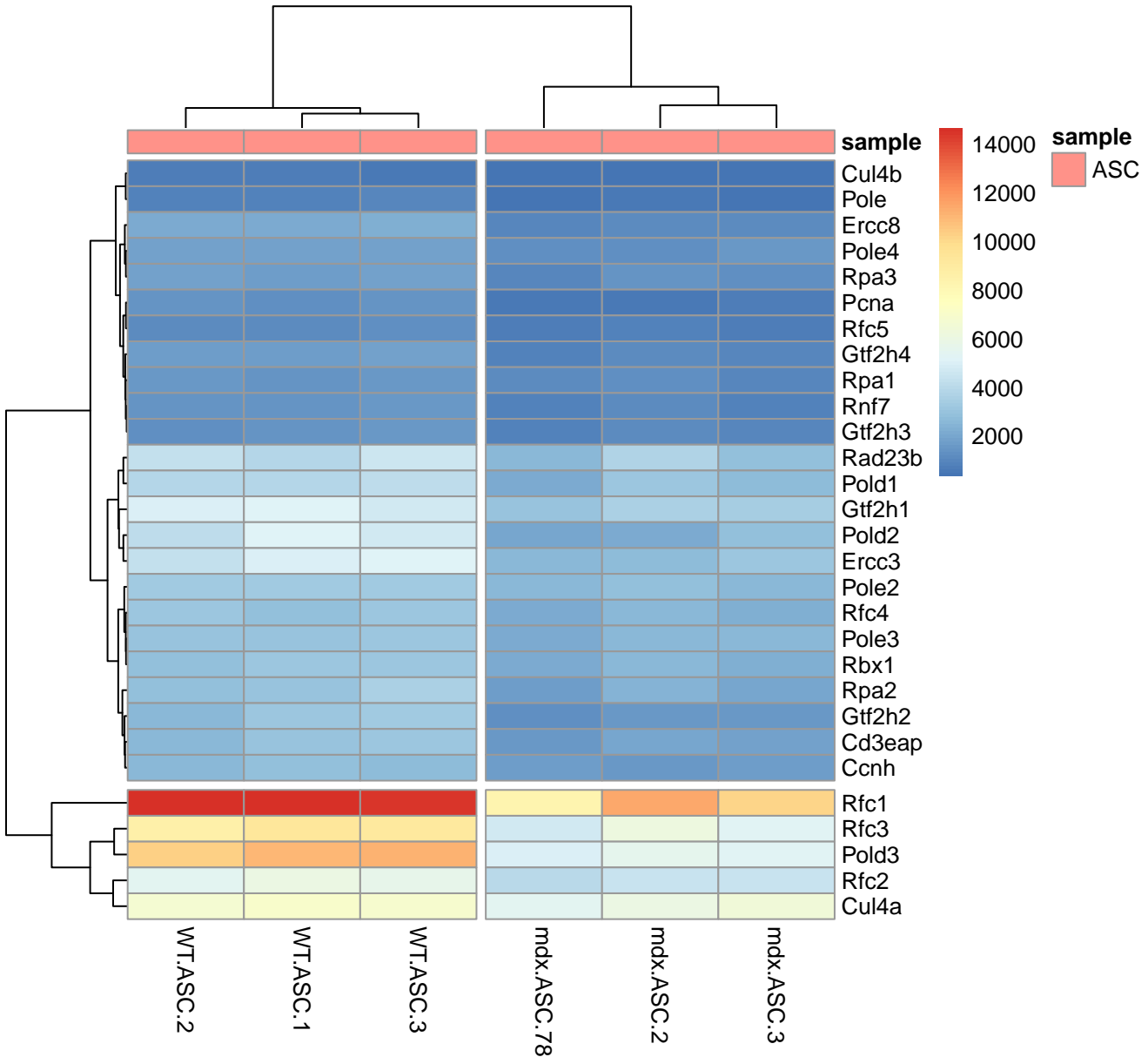# KEGG_PPAR_SIGNALING_PATHWAY

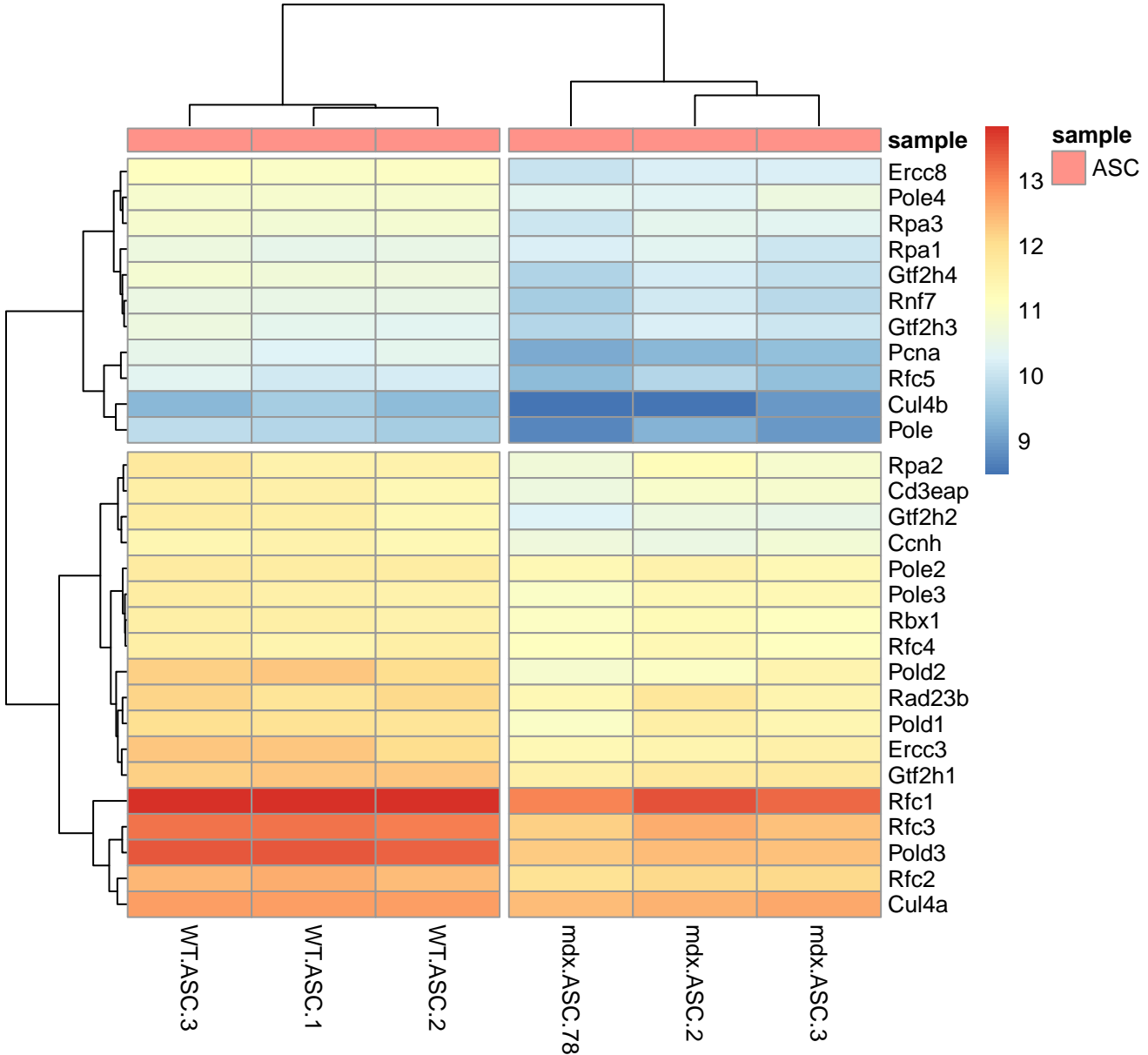**Expressed Matrix for genes active in KEGG_PPAR_SIGNALING_PATHWAY**

Scalling expressed matrix for genes active in KEGG_PPAR_SIGNALING_PATHWAY
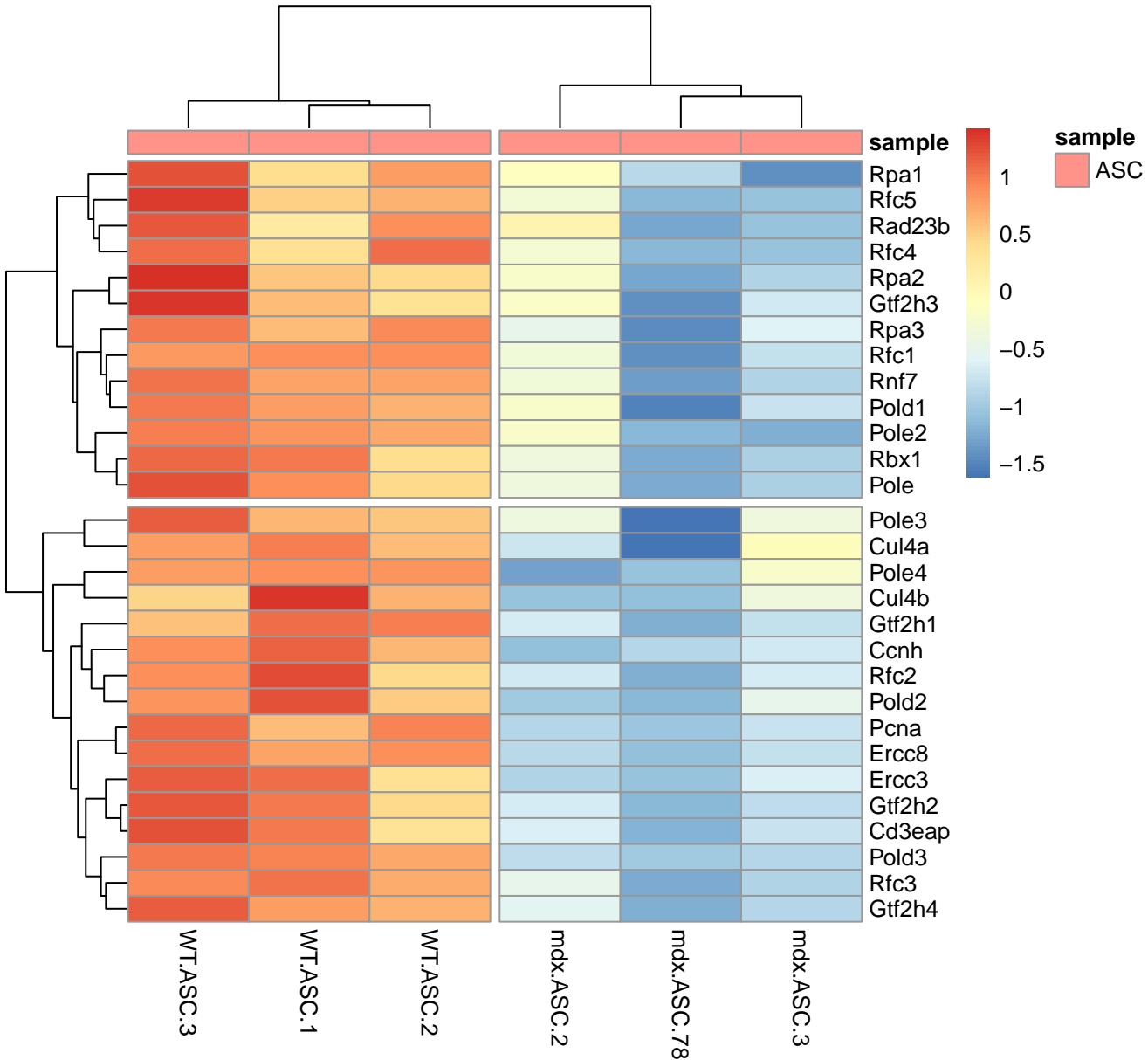
Expressed Matrix from Normalized for genes in KEGG_NUCLEOTIDE_EXCISION_REPAIR
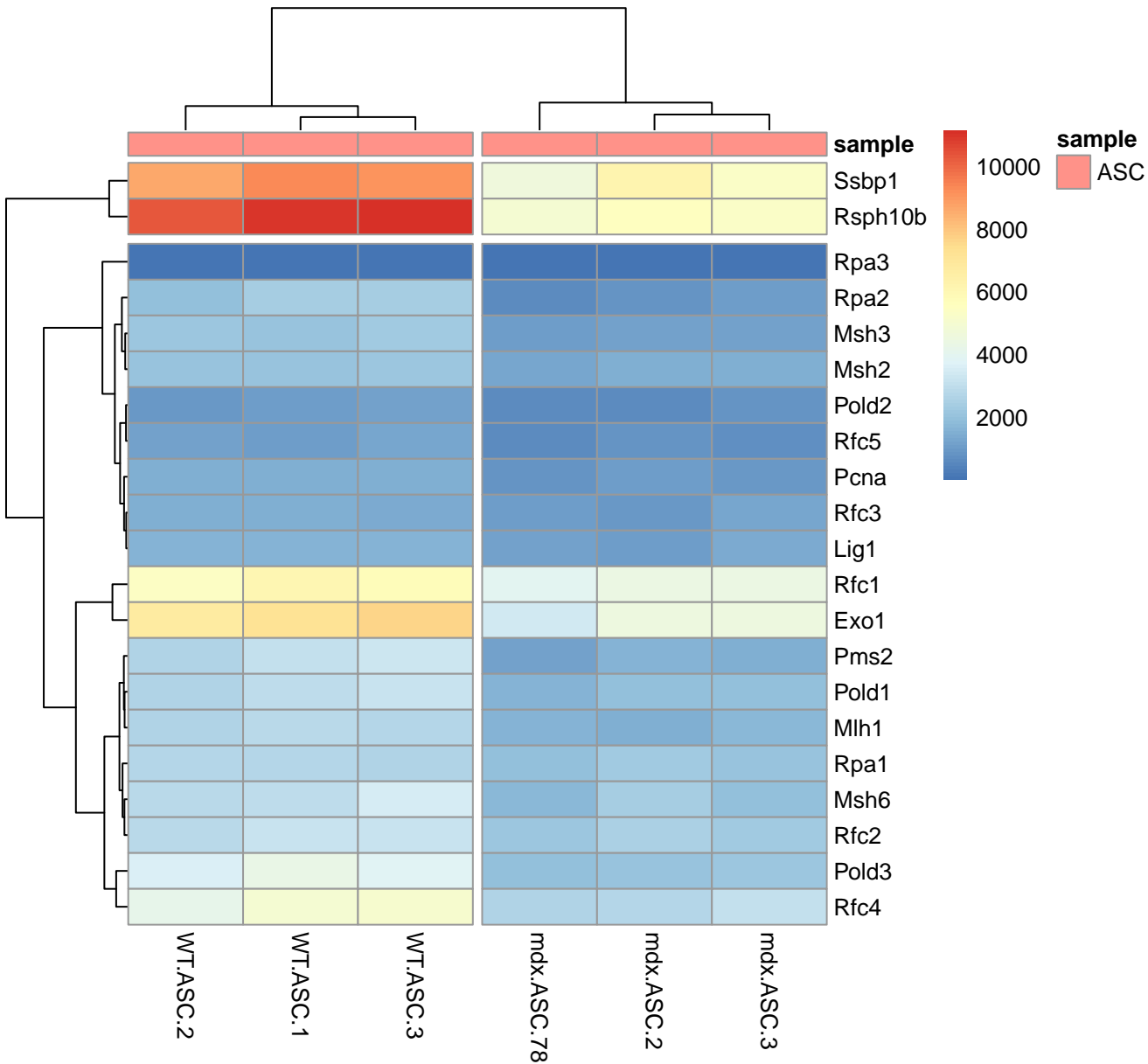
Expressed Matrix for genes active in
KEGG_NUCLEOTIDE_EXCISION_REPAIR

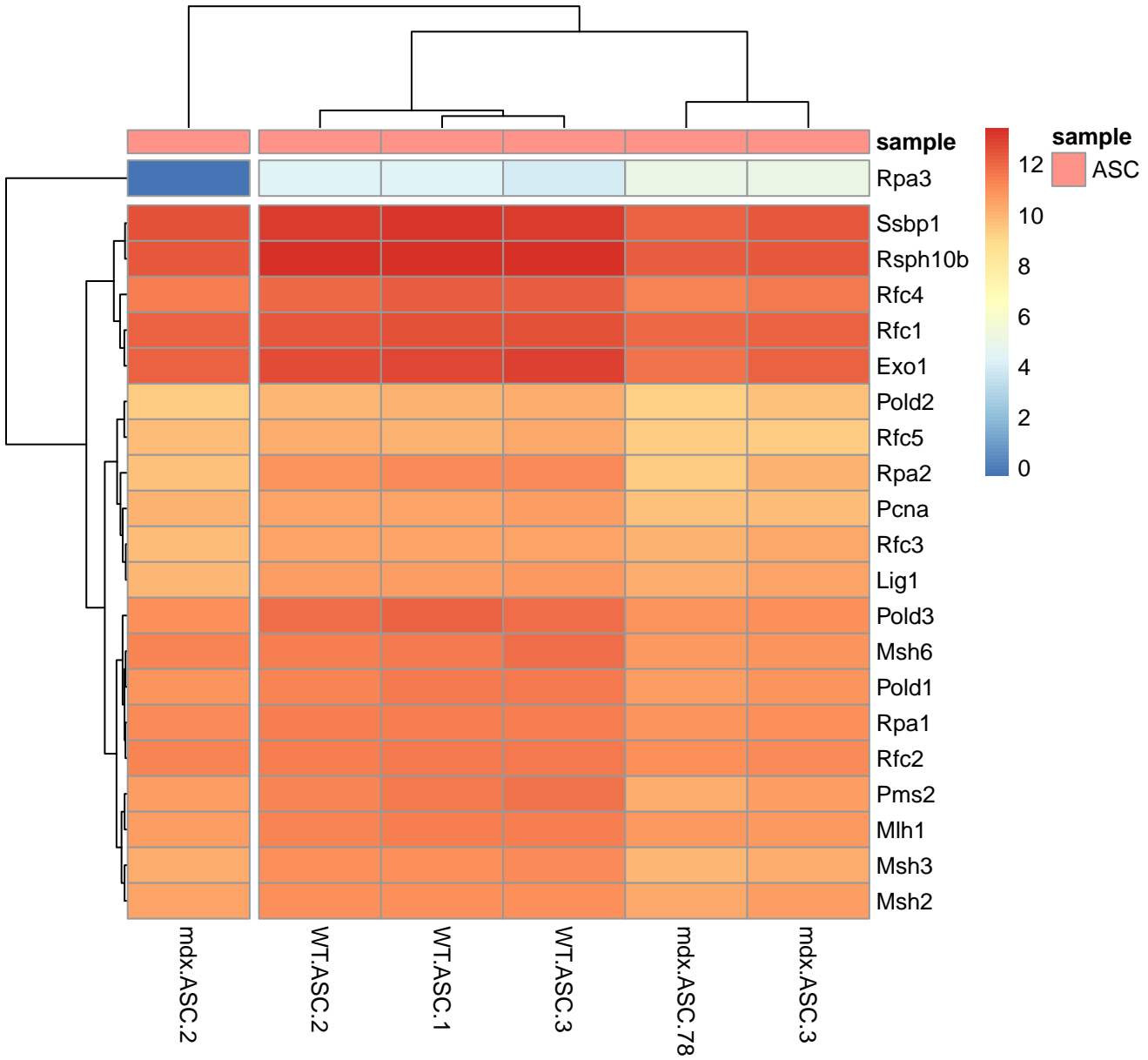**Scalling expressed matrix for genes active in KEGG_NUCLEOTIDE_EXCISION_REPAIR**
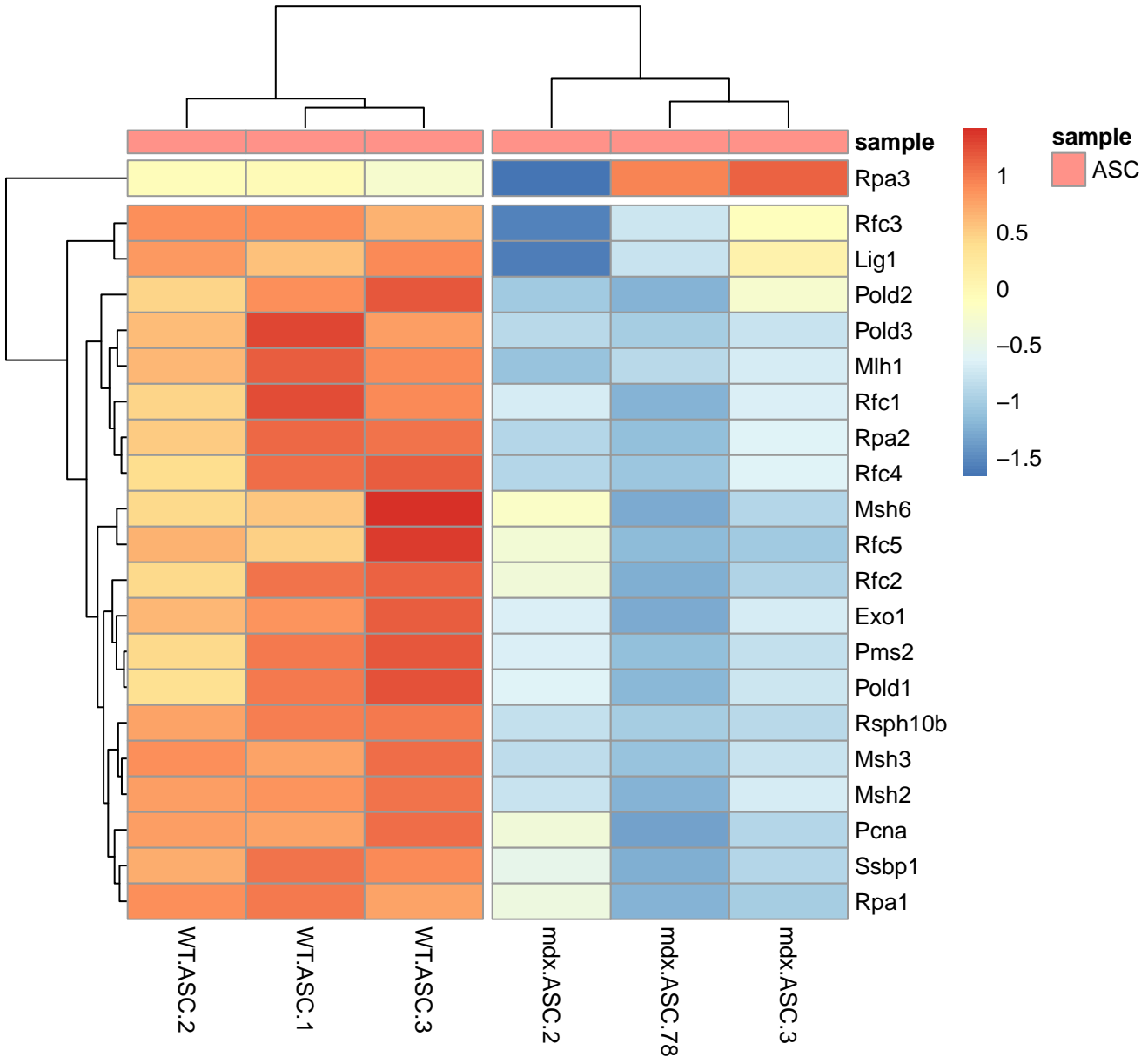
Expressed Matrix from Normalized for genes in KEGG_MISMATCH_REPAIR
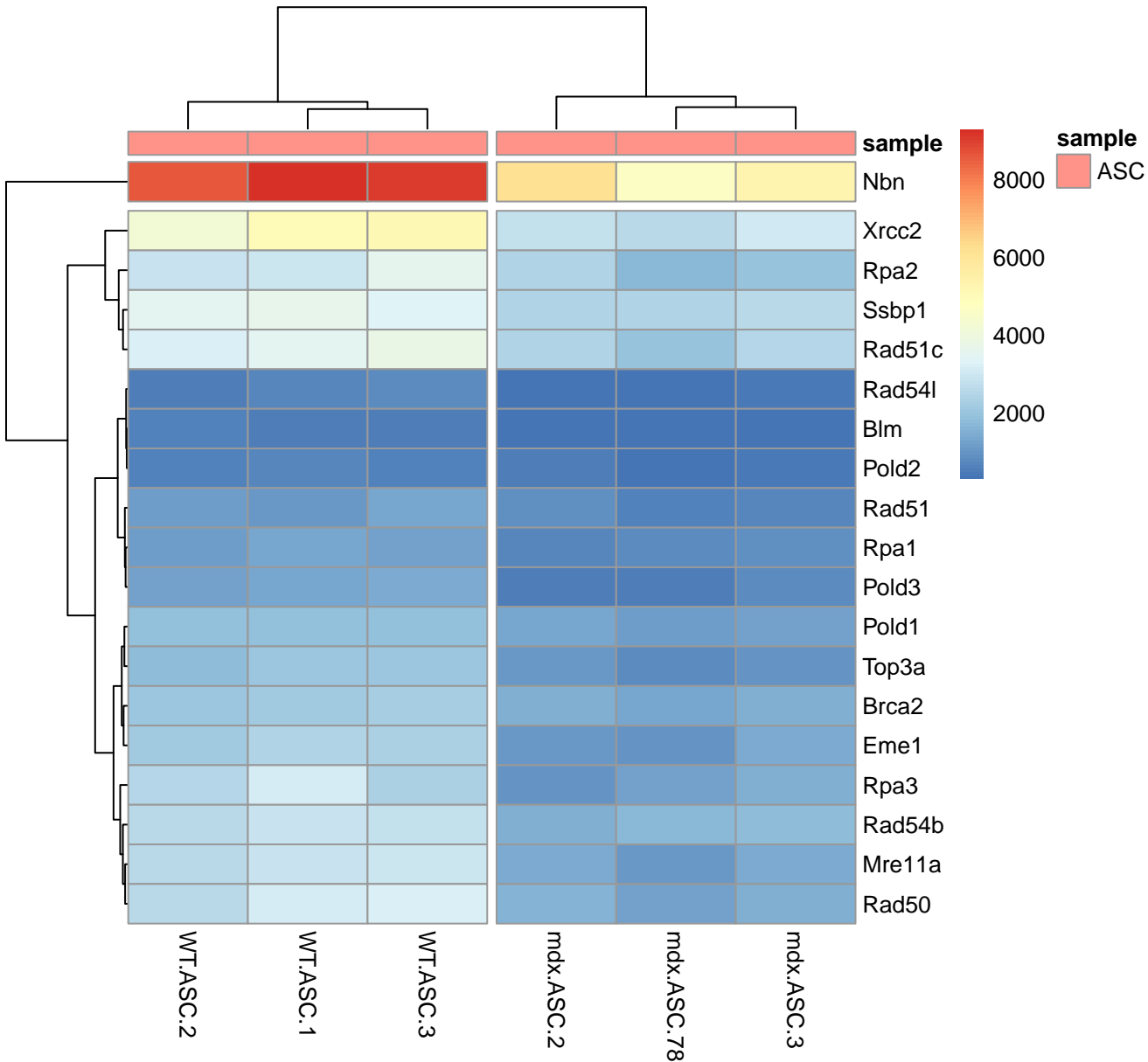
Expressed Matrix for genes active in
KEGG_MISMATCH_REPAIR

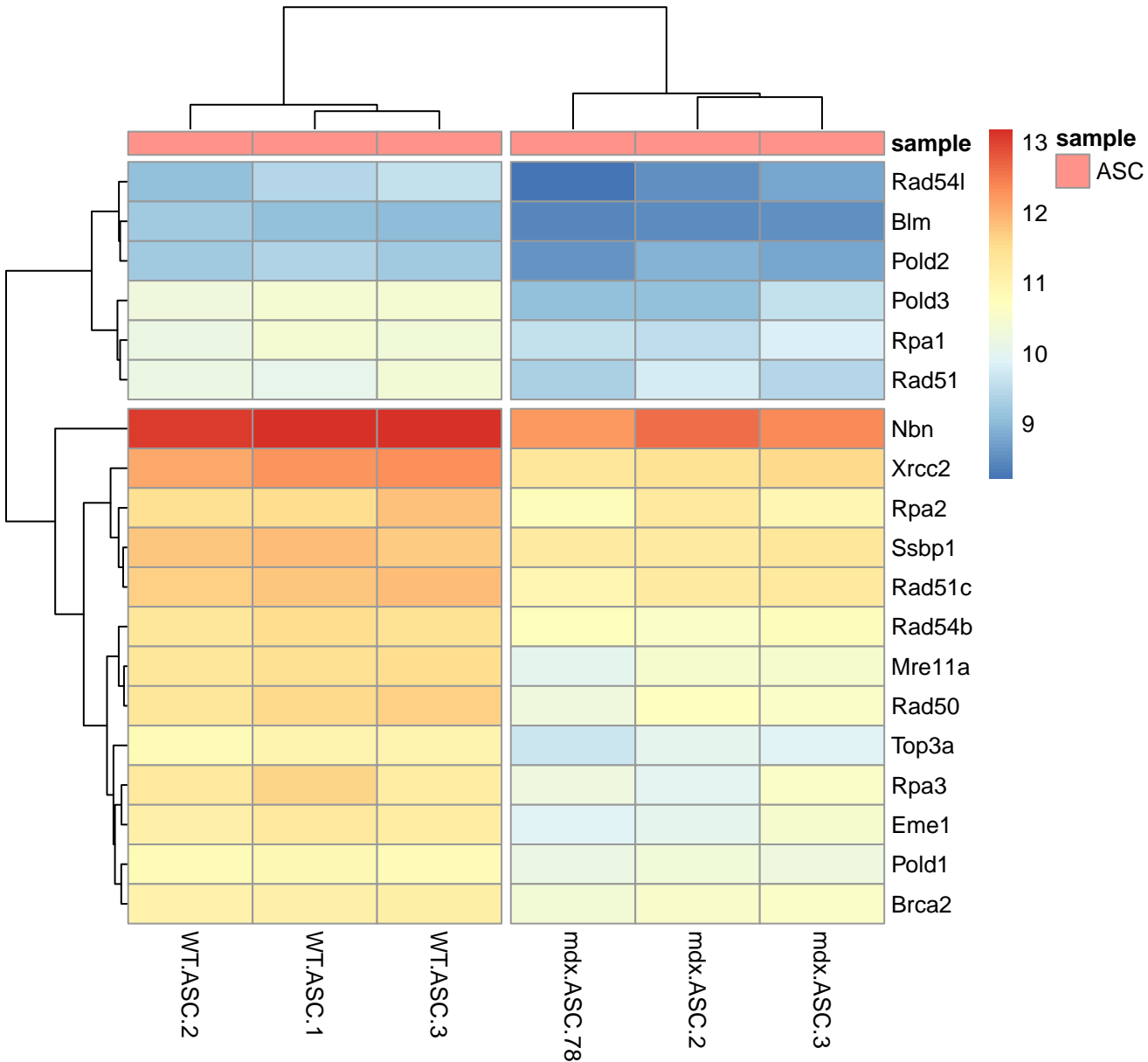**Scalling expressed matrix for genes active in KEGG_MISMATCH_REPAIR**

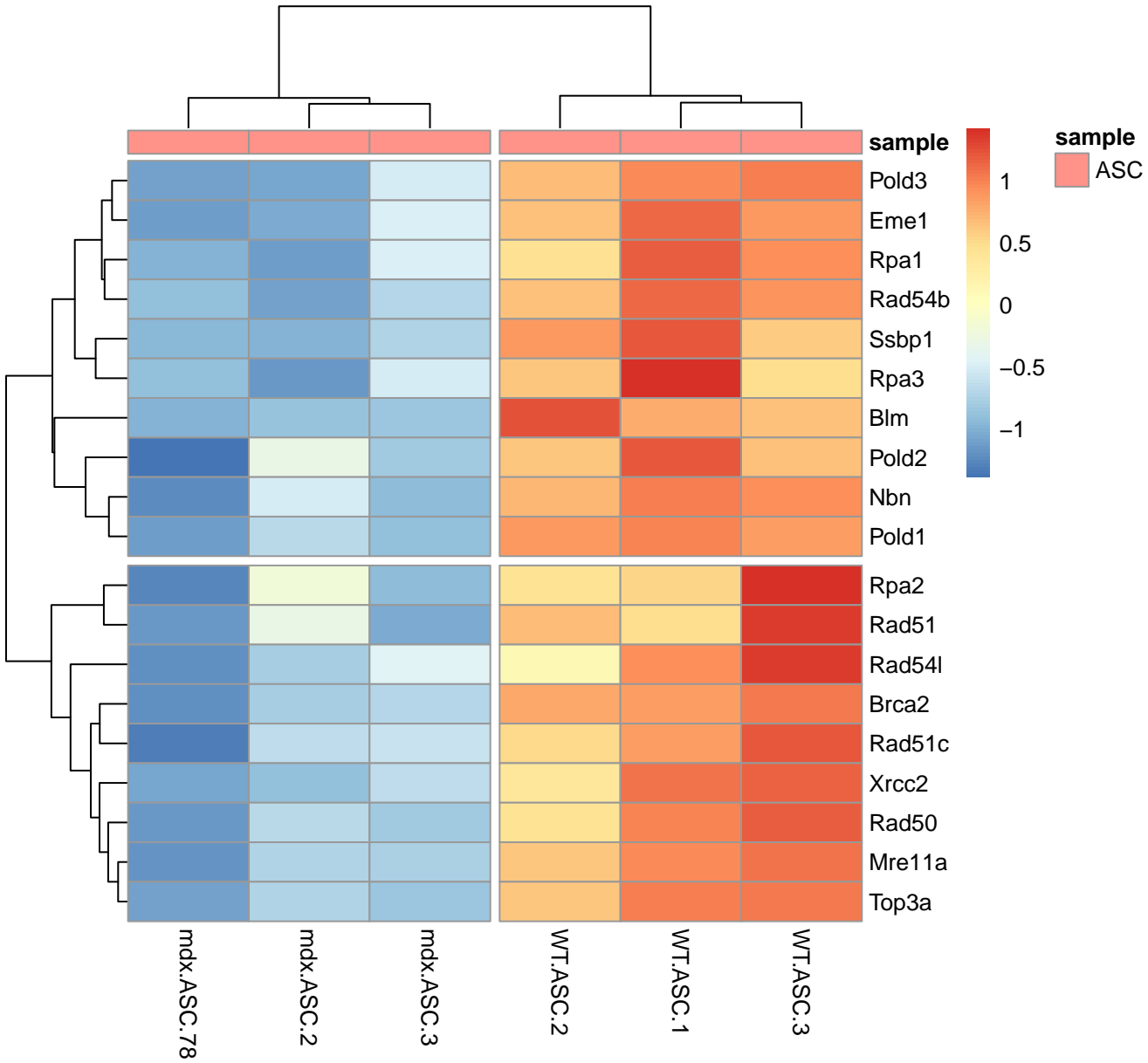# Expressed Matrix from Normalized for genes in
KEGG_HOMOLOGOUS_RECOMBINATION

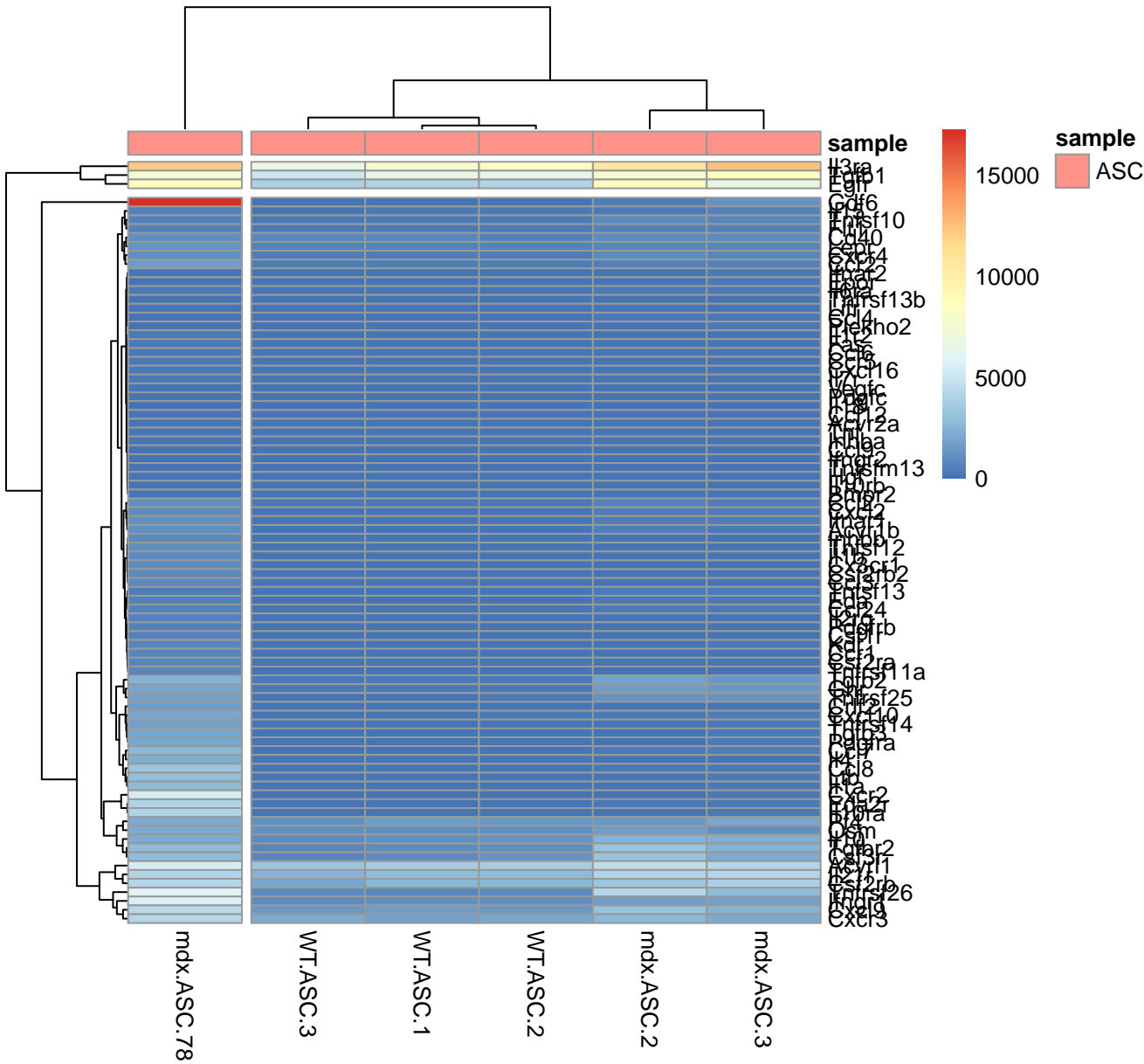**Expressed Matrix for genes active in KEGG_HOMOLOGOUS_RECOMBINATION**

Scalling expressed matrix for genes active in KEGG_HOMOLOGOUS_RECOMBINATION

Expressed Matrix from Normalized for genes in
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION

Expressed Matrix for genes active in
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION

Scalling expressed matrix for genes active in
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION
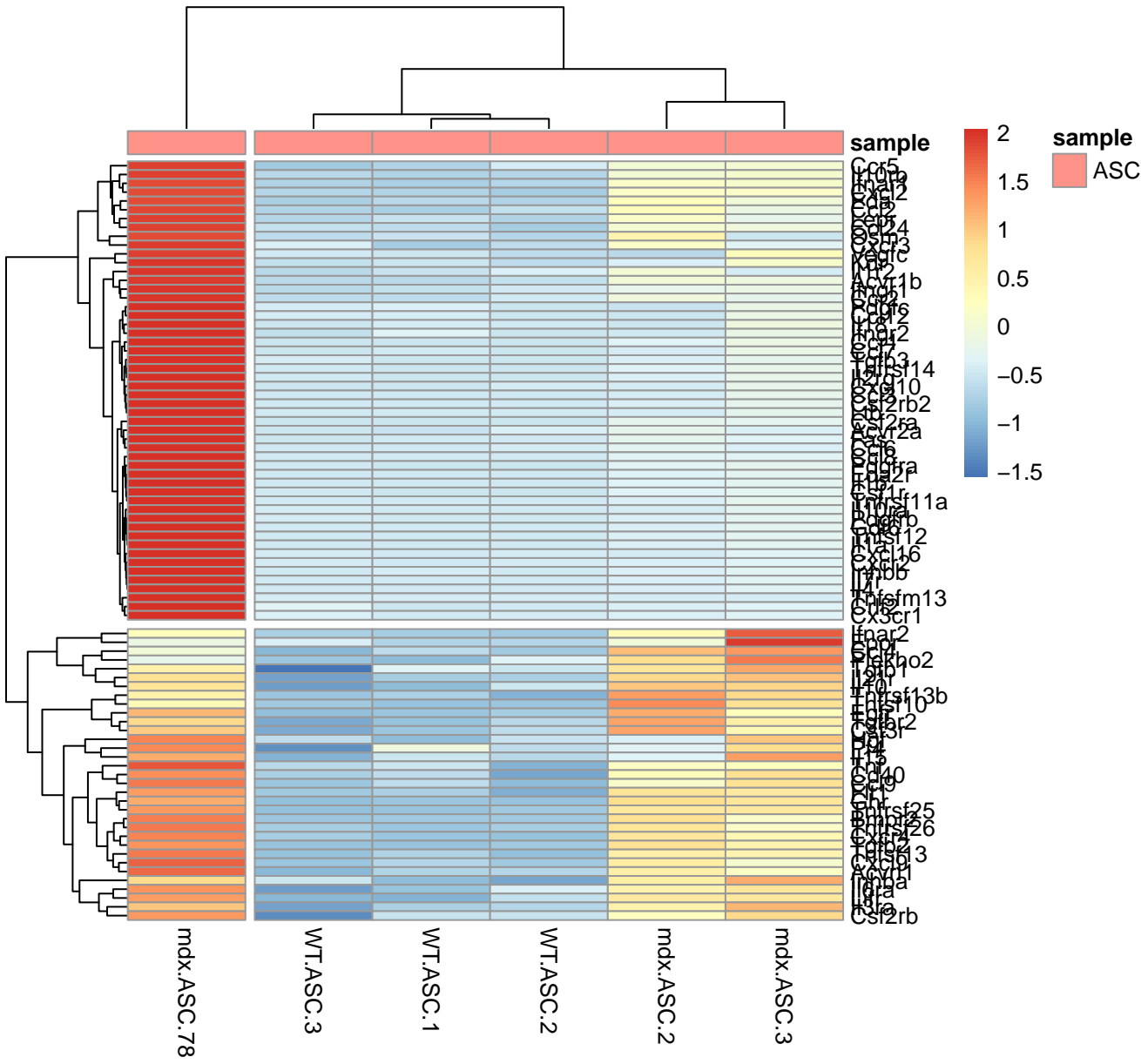
Expressed Matrix from Normalized for genes in KEGG_CHEMOKINE_SIGNALING_PATHWAY
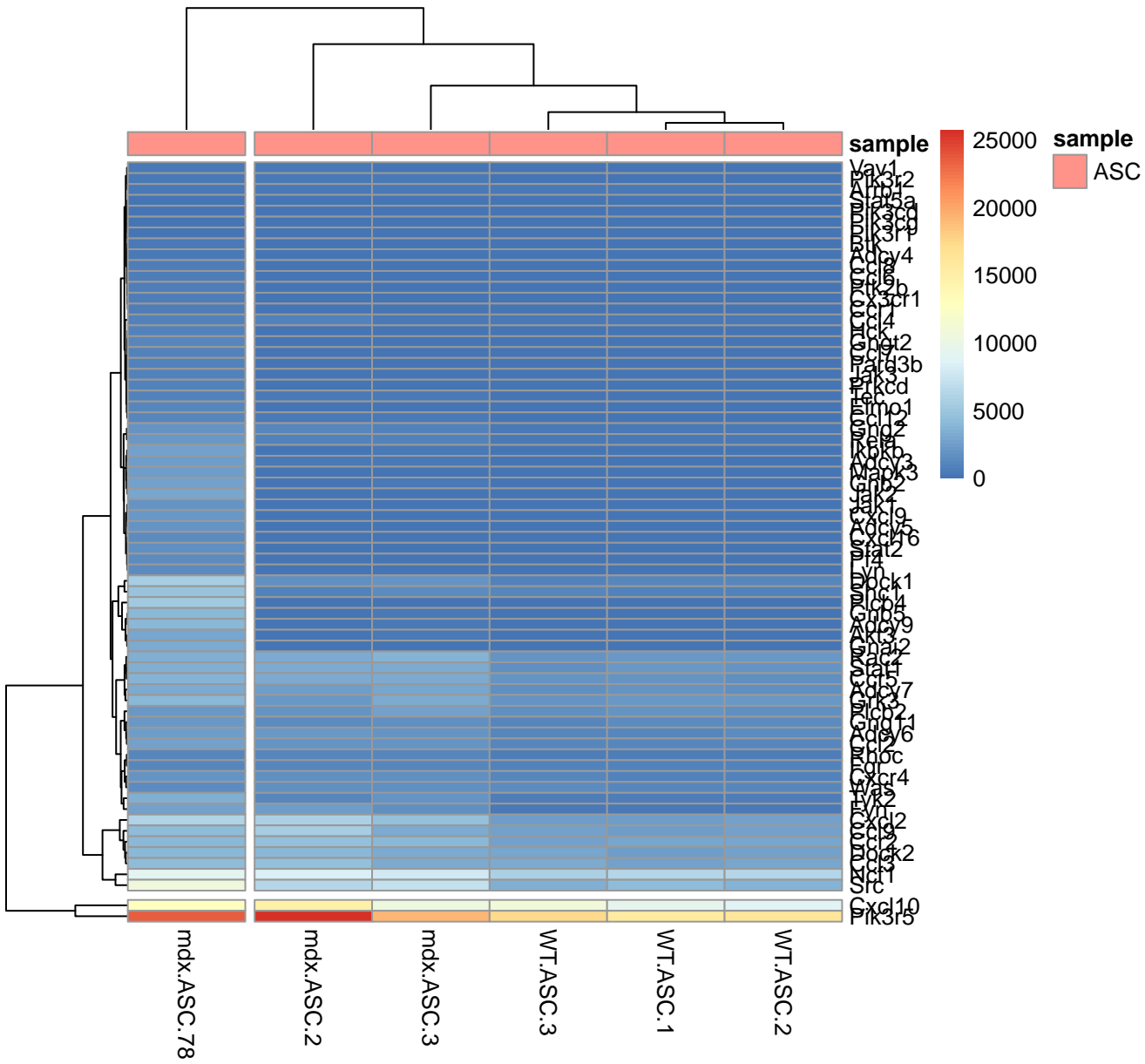
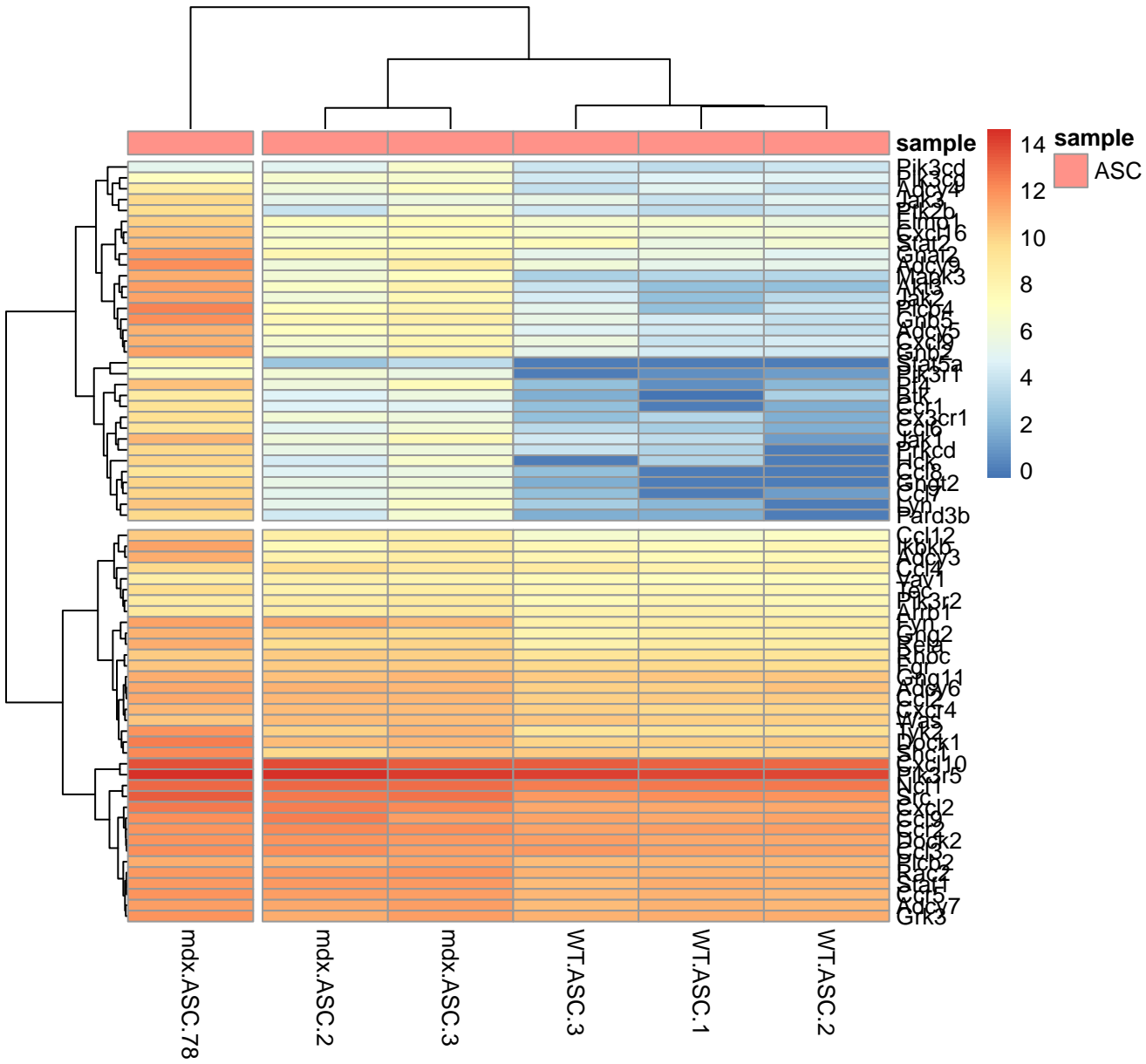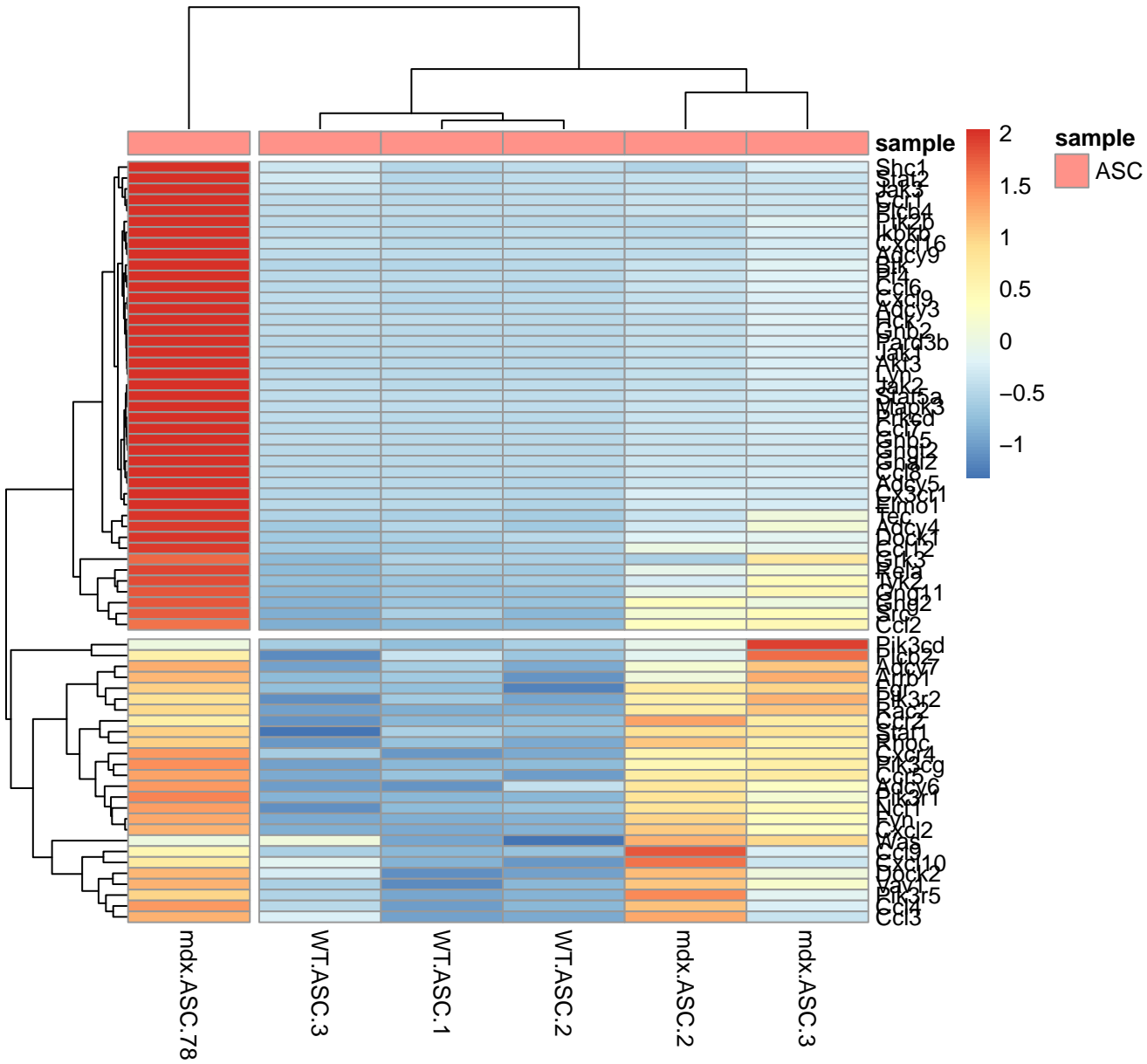Expressed Matrix for genes active in
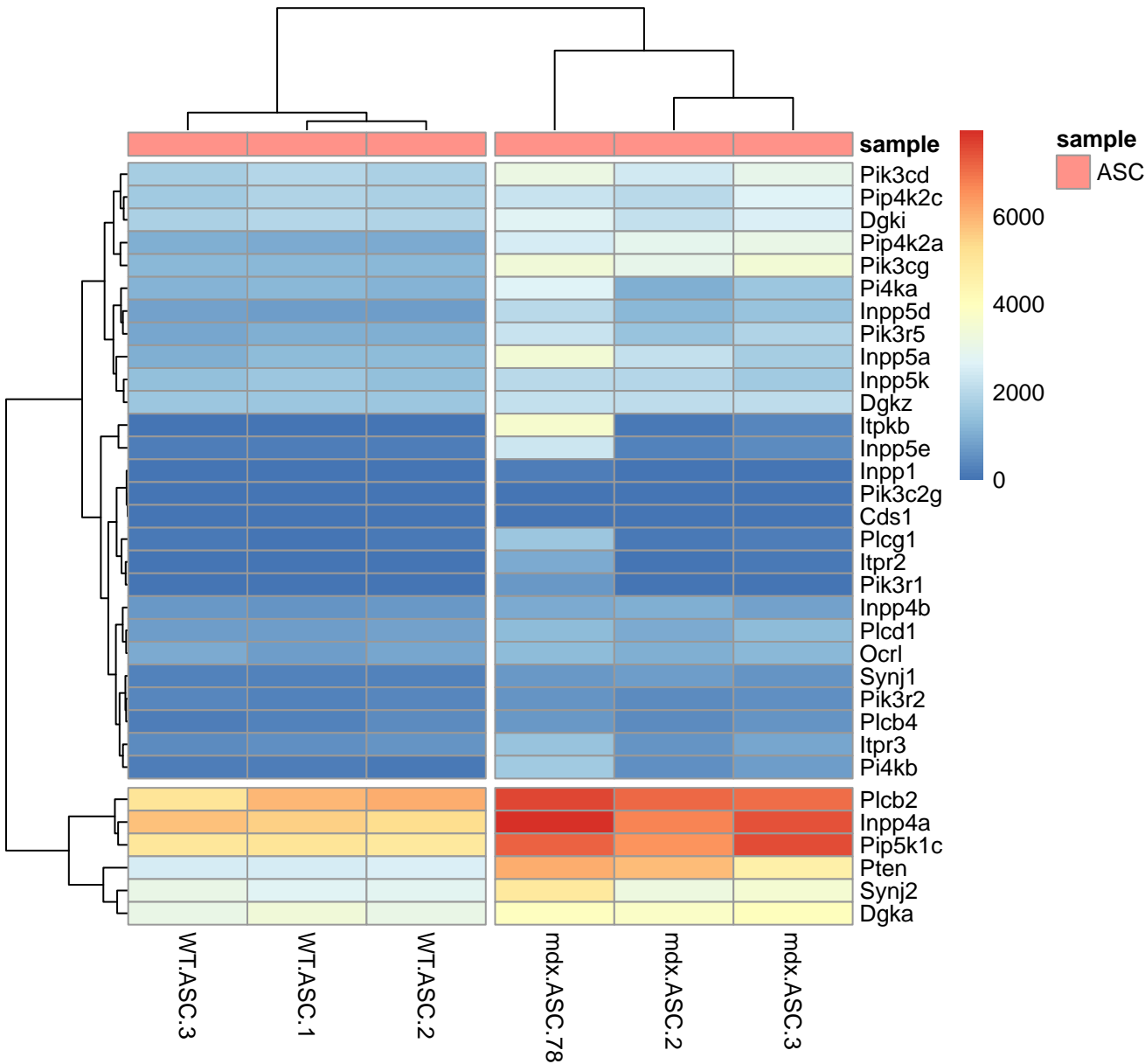KEGG_CHEMOKINE_SIGNALING_PATHWAY

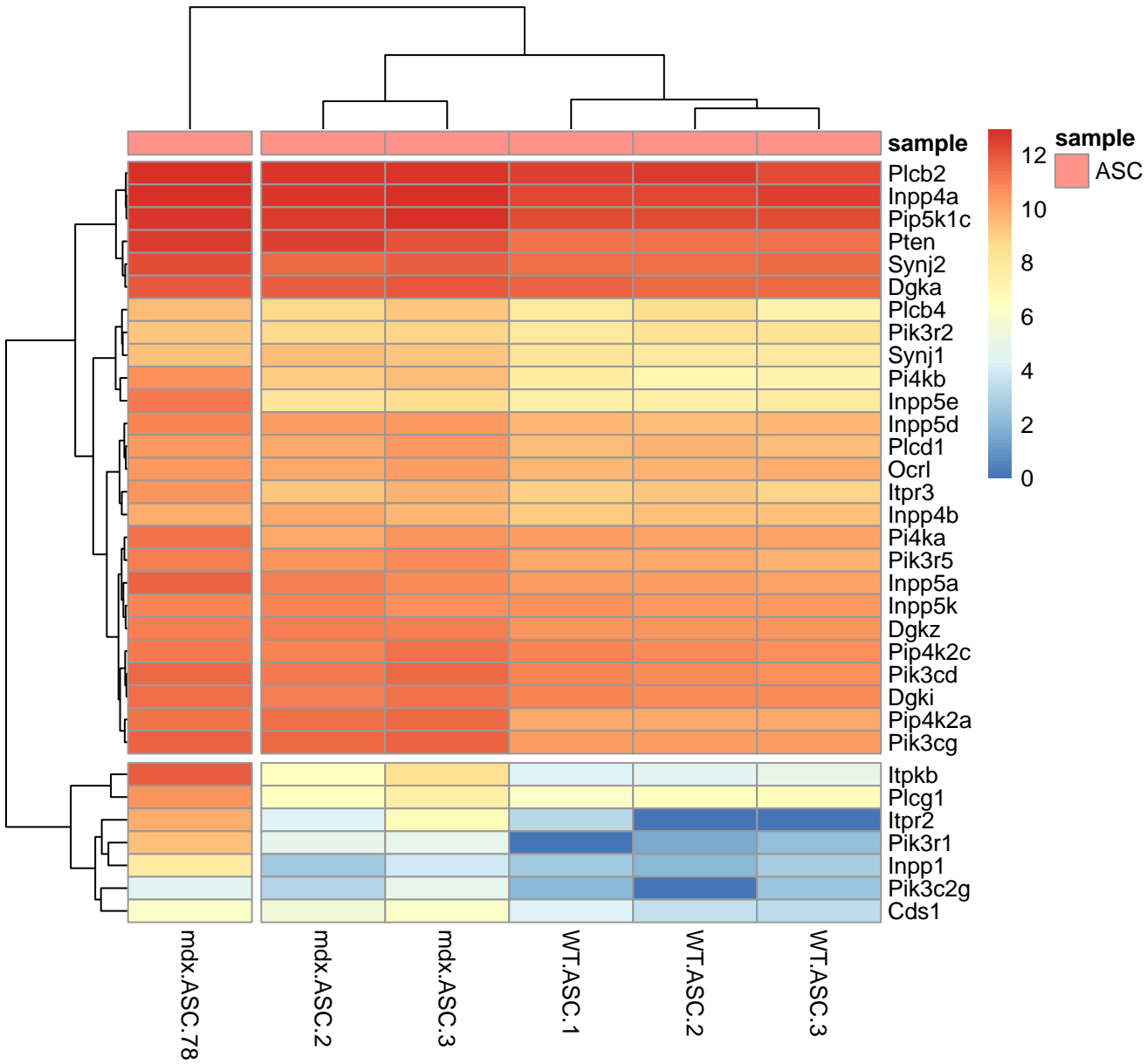**Scalling expressed matrix for genes active in KEGG_CHEMOKINE_SIGNALING_PATHWAY**

Expressed Matrix from Normalized for genes in KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM
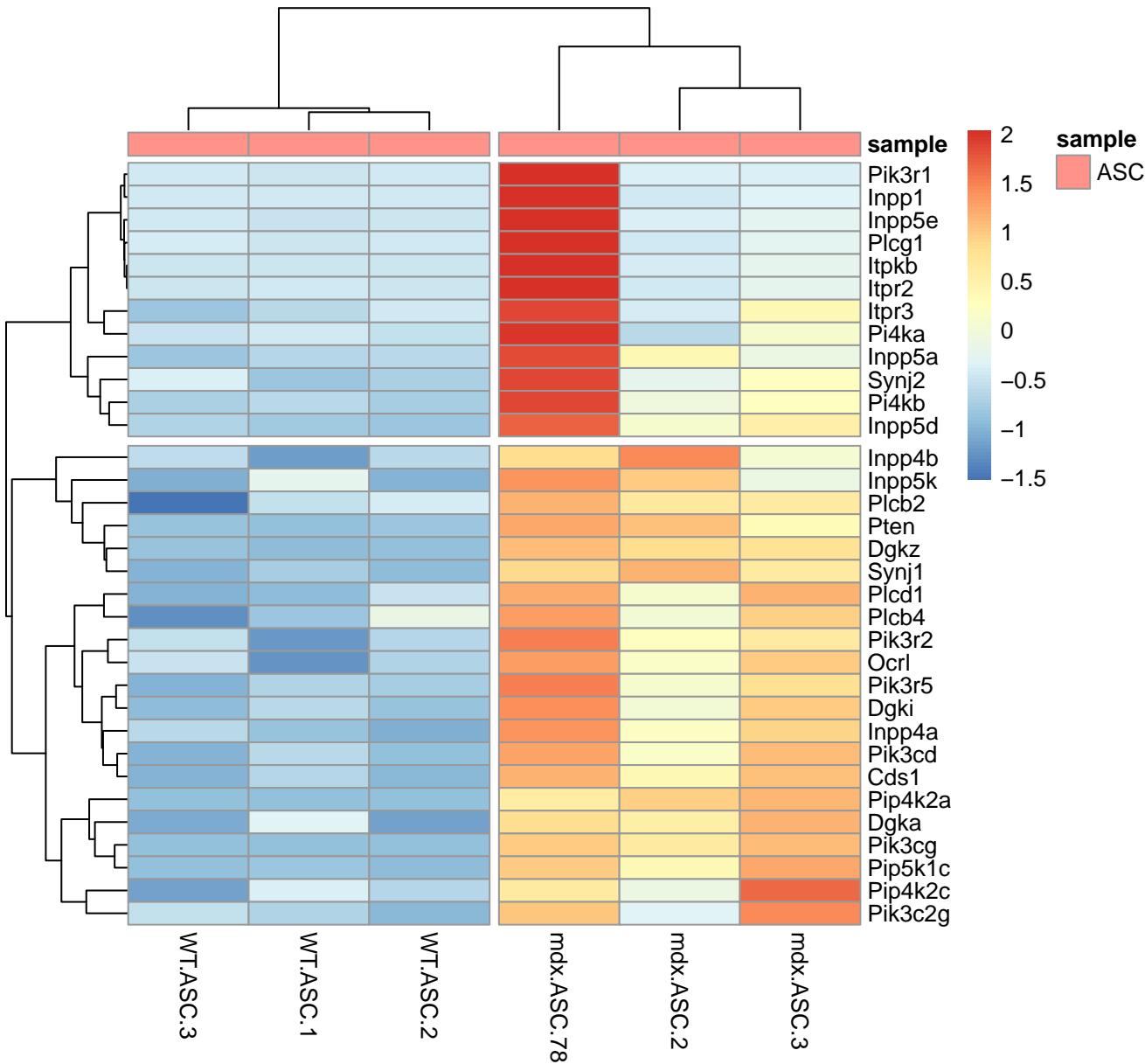
Expressed Matrix for genes active in
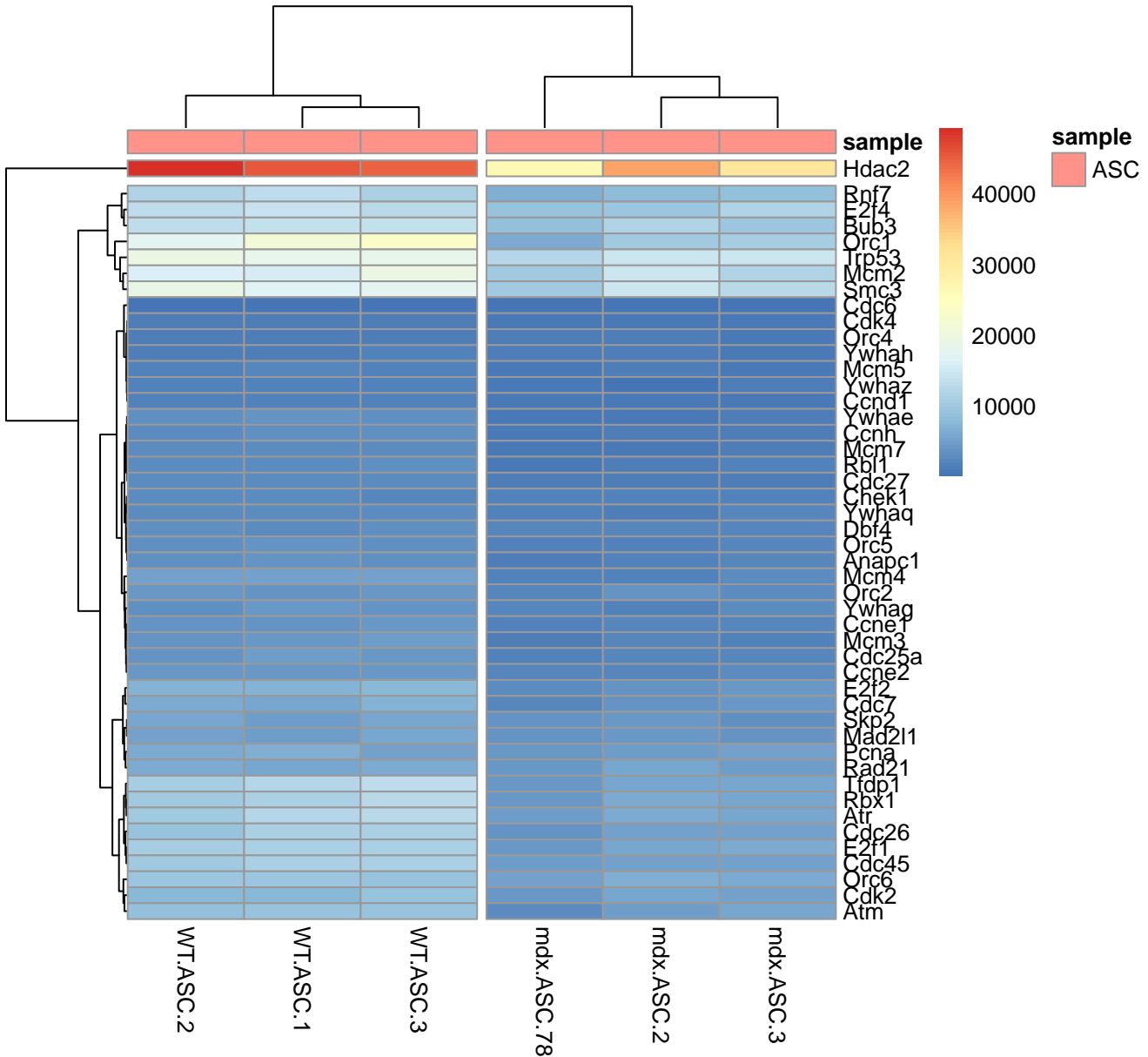KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM

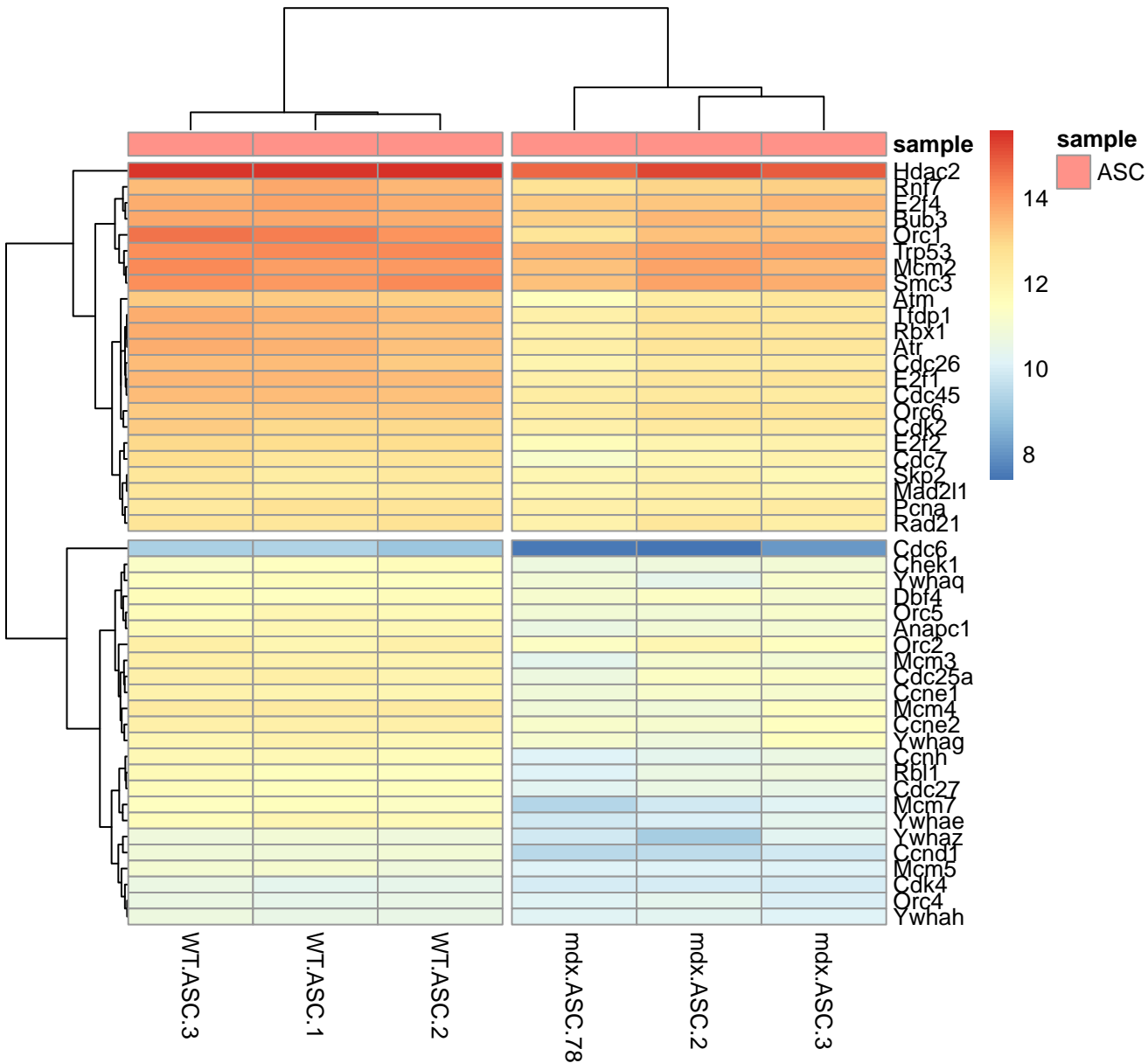**Scalling expressed matrix for genes active in KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM**
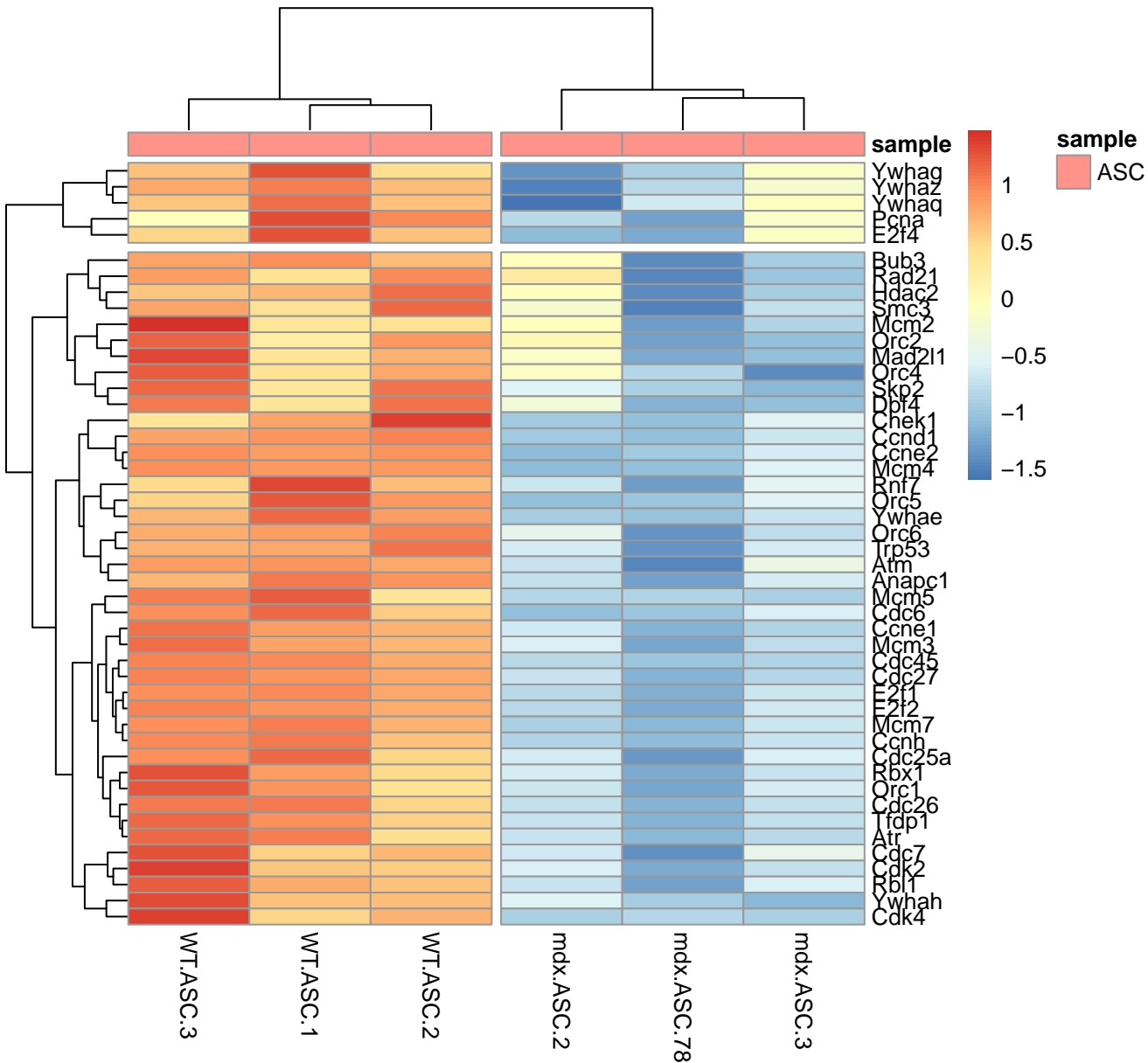
Expressed Matrix from Normalized for genes in KEGG_CELL_CYCLE
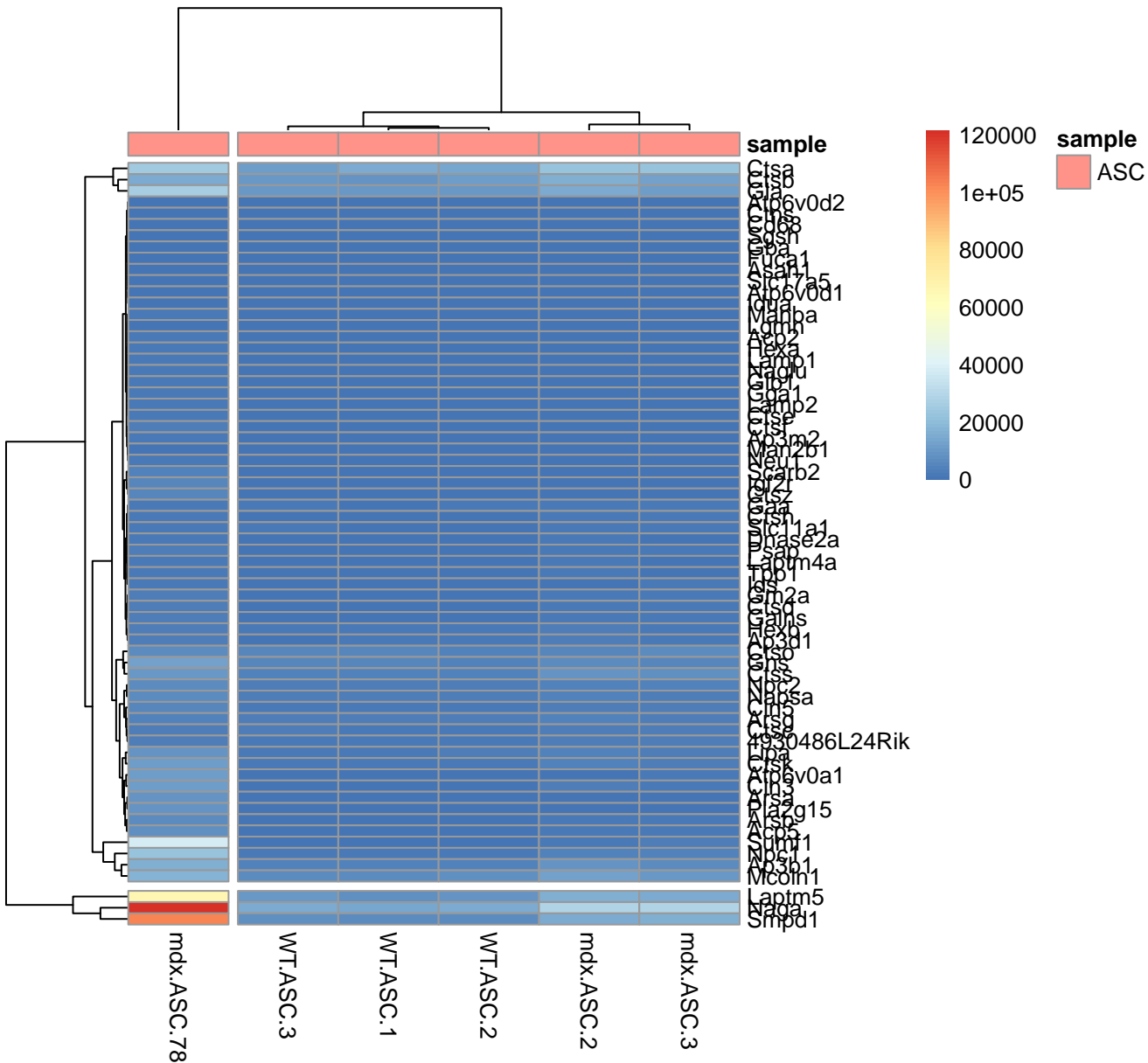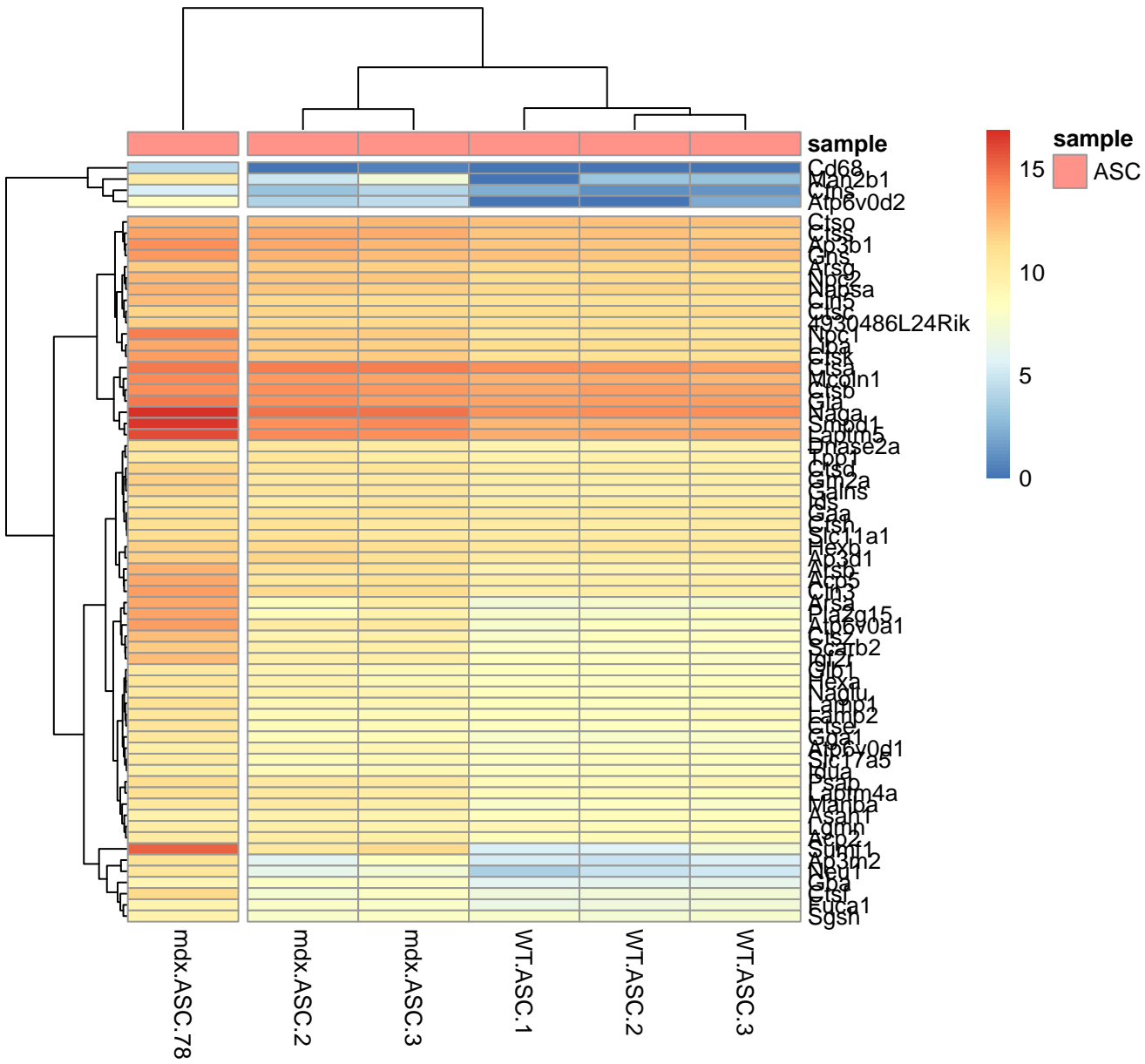
Expressed Matrix for genes active in KEGG_CELL_CYCLE
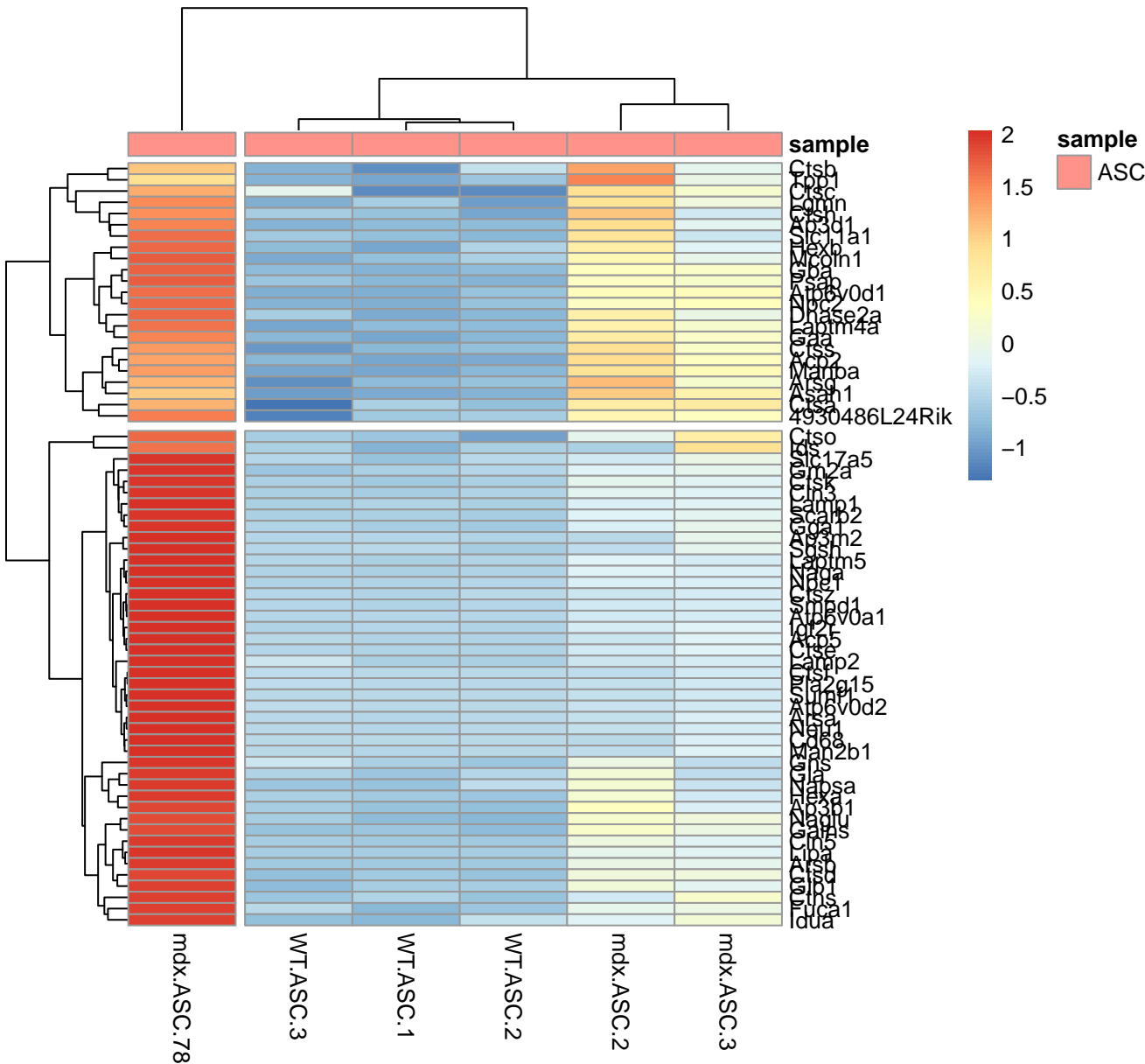
Scalling expressed matrix for genes active in KEGG_CELL_CYCLE

Expressed Matrix from Normalized for genes in KEGG_LYSOSOME

Expressed Matrix for genes active in
KEGG_LYSOSOME

Scalling expressed matrix for genes active in KEGG_LYSOSOME

Heatmap with sample legend (ASC). Row labels (top to bottom): Ctsb, Fnip1, Ctsc, Litin, Ctsl1, Ap3d1, Slc11a1, Mcfd, Mcoln1, Spaa, Gsap, Atp6v0d1, Abp2, Dnase2a, Laptm4a, Gaa, Ctss, Mcn2, Manba, Atsg, Asah1, 4930486L24Rik, Ctso, Ids, Slc17a5, Gm2a, Ctsk, Clnk, Ctnp1, Scarb2, Gga, Shsh2, Laptm5, Naga, Npc1, Ctsz, Smpd1, Atp6v0a1, Igf2r, Ap5, Ctse, Ctmp2, Ctsf, Cts2g15, Slmo, Atp6v0d2, Atss1, Nagd, Cd68, Man2b1, Gns, Gla, Naga, Napsa, Ap3b1, Naglu, Galhs, Cln5, Lipa, Arsb, Ctsd, Gsb1, Gns, Pla1, Idua.

Column labels: mdx.ASC.78, WT.ASC.3, WT.ASC.1, WT.ASC.2, mdx.ASC.2, mdx.ASC.3

Color scale: 2, 1.5, 1, 0.5, 0, −0.5, −1

Expressed Matrix from Normalized for genes in KEGG_PEROXISOME

Expressed Matrix for genes active in
KEGG_PEROXISOME

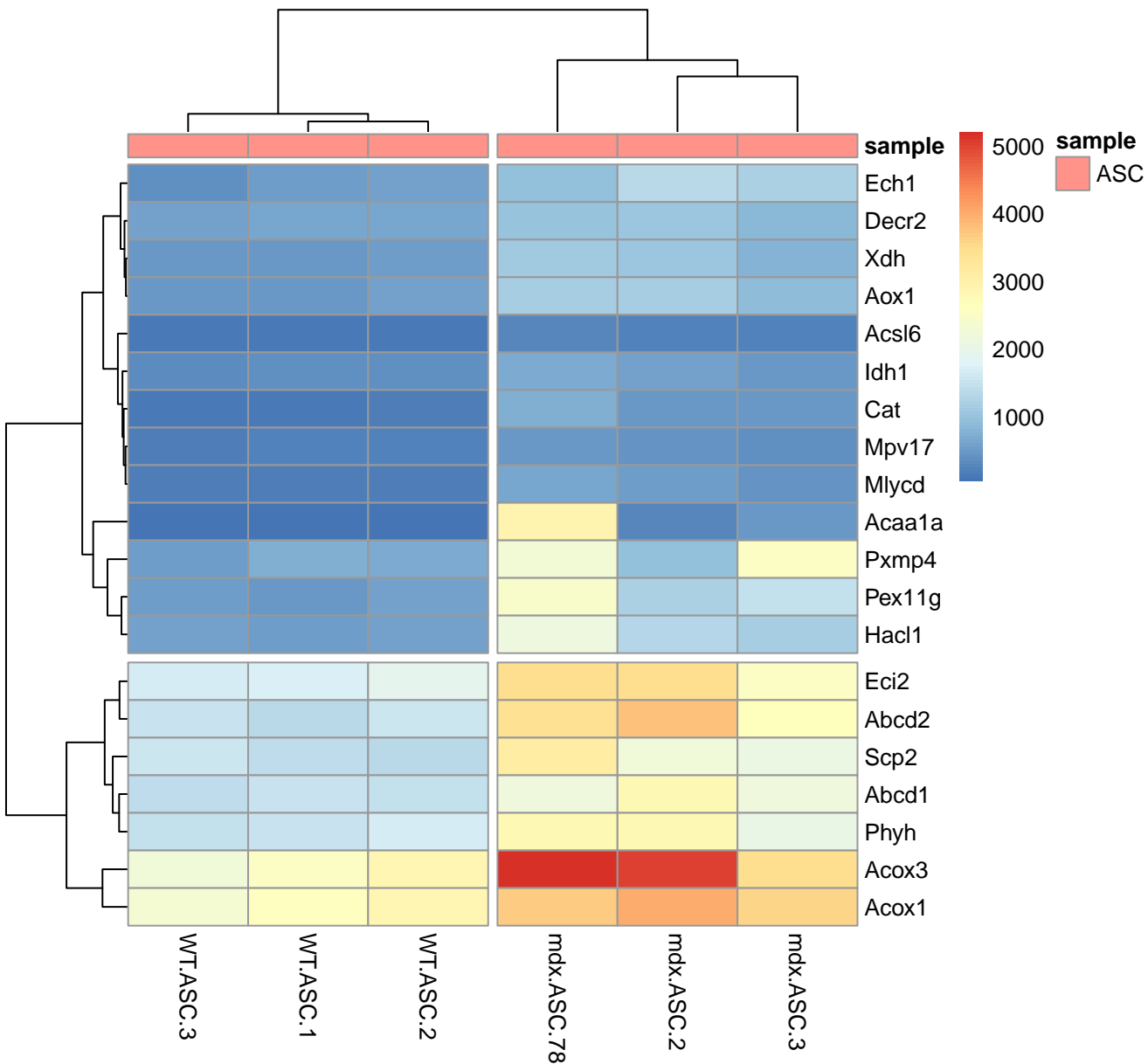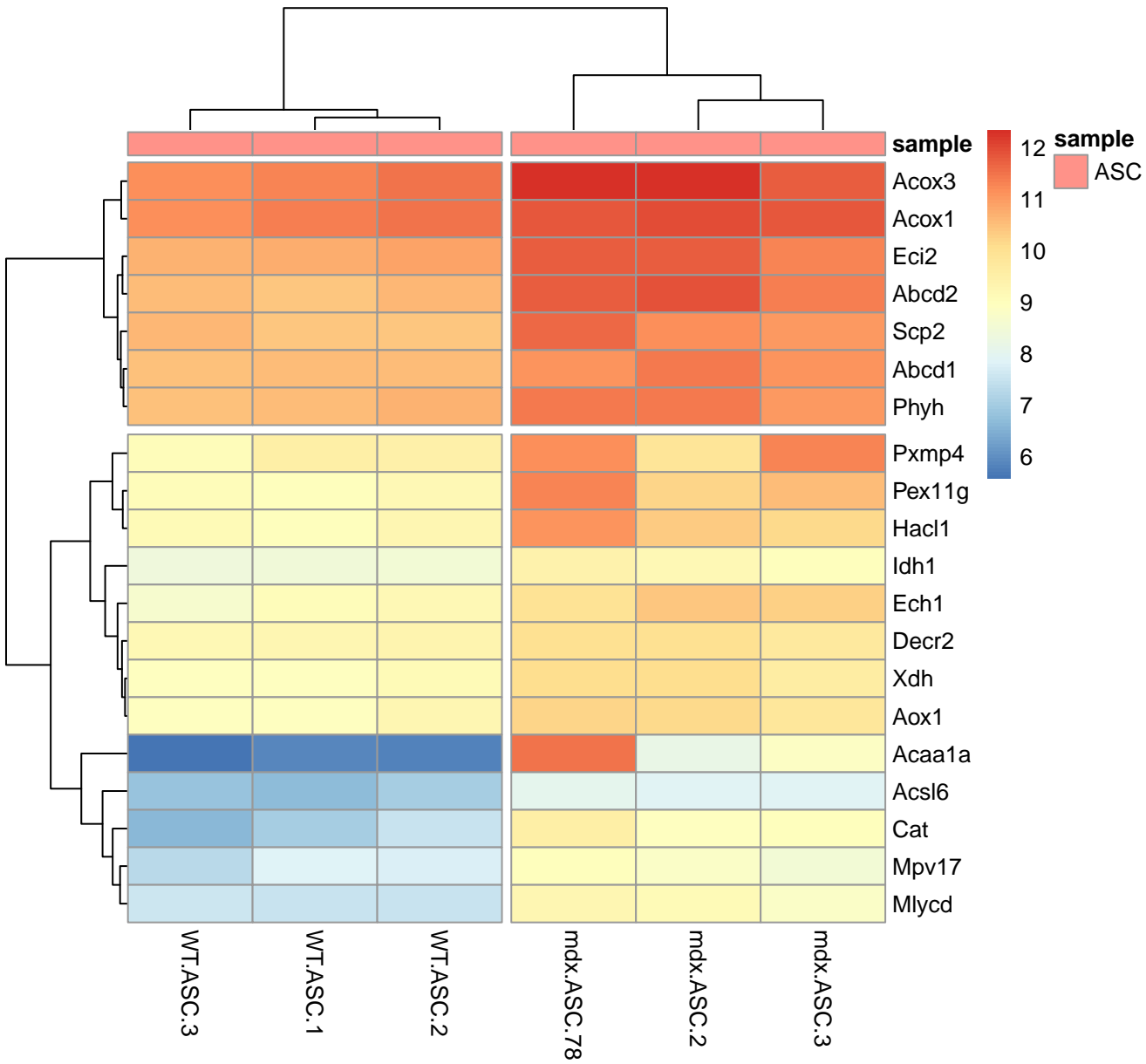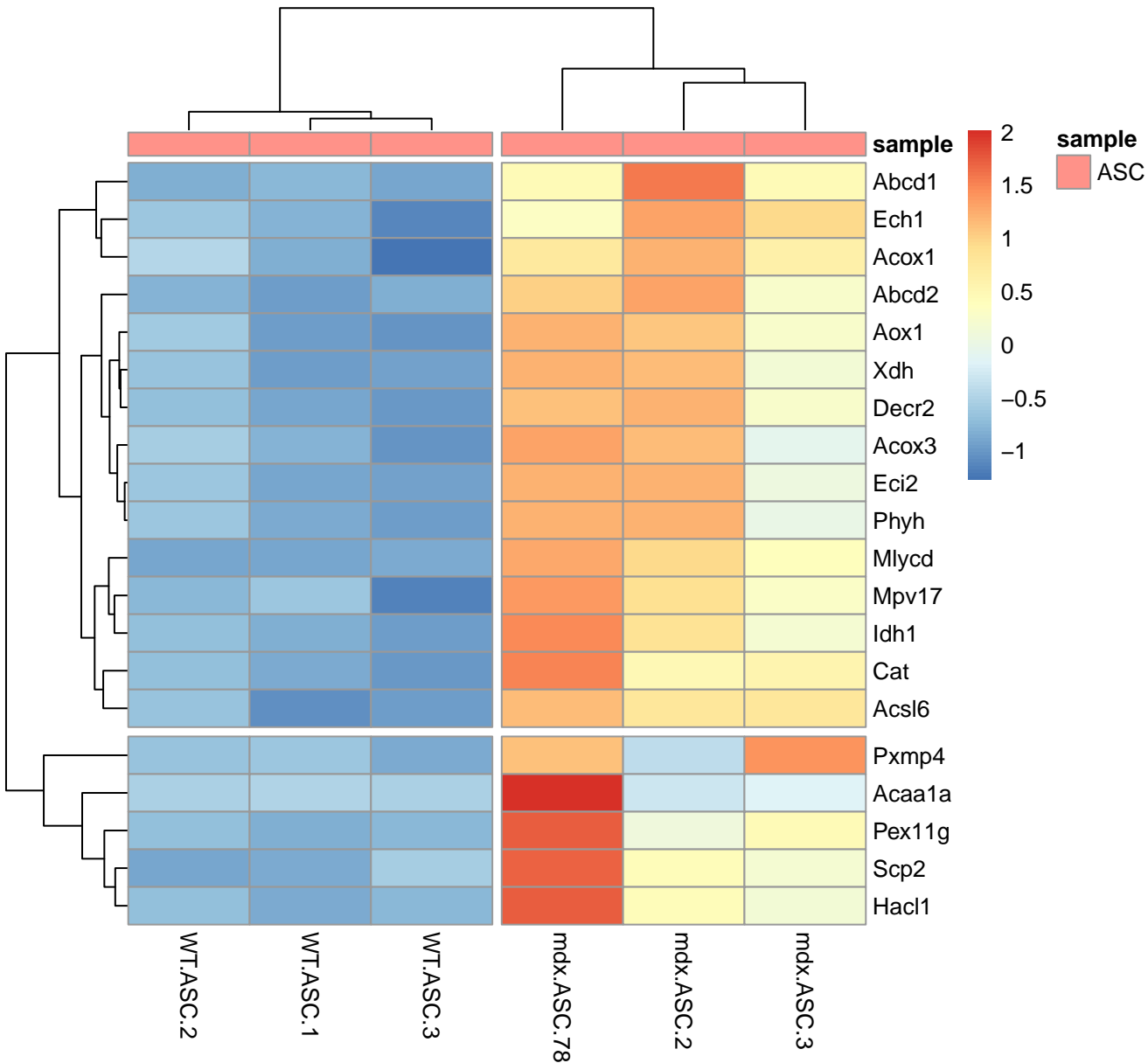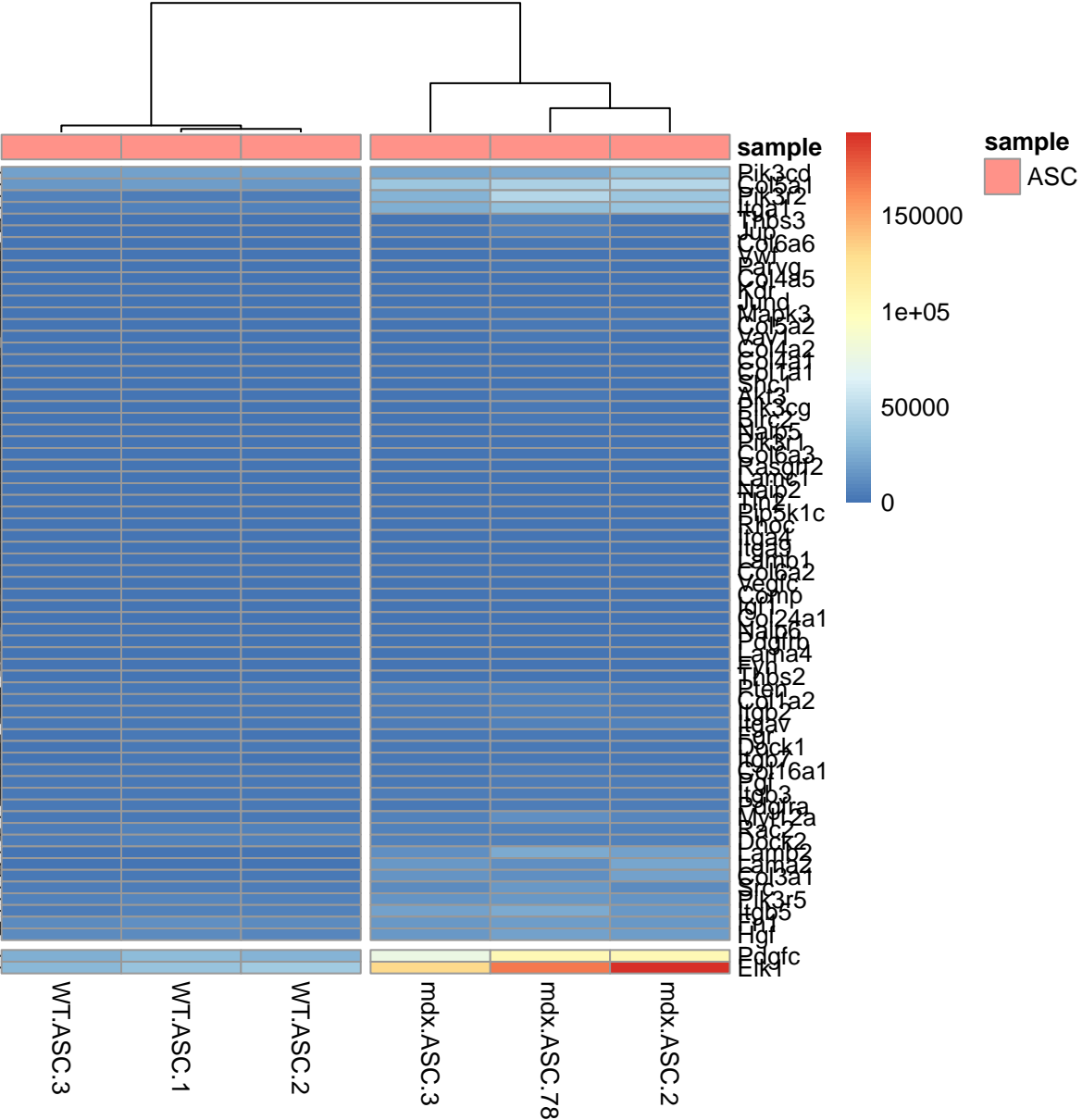# Scalling expressed matrix for genes active in
KEGG_PEROXISOME

Expressed Matrix from Normalized for genes in KEGG_FOCAL_ADHESION

Expressed Matrix for genes active in
KEGG_FOCAL_ADHESION

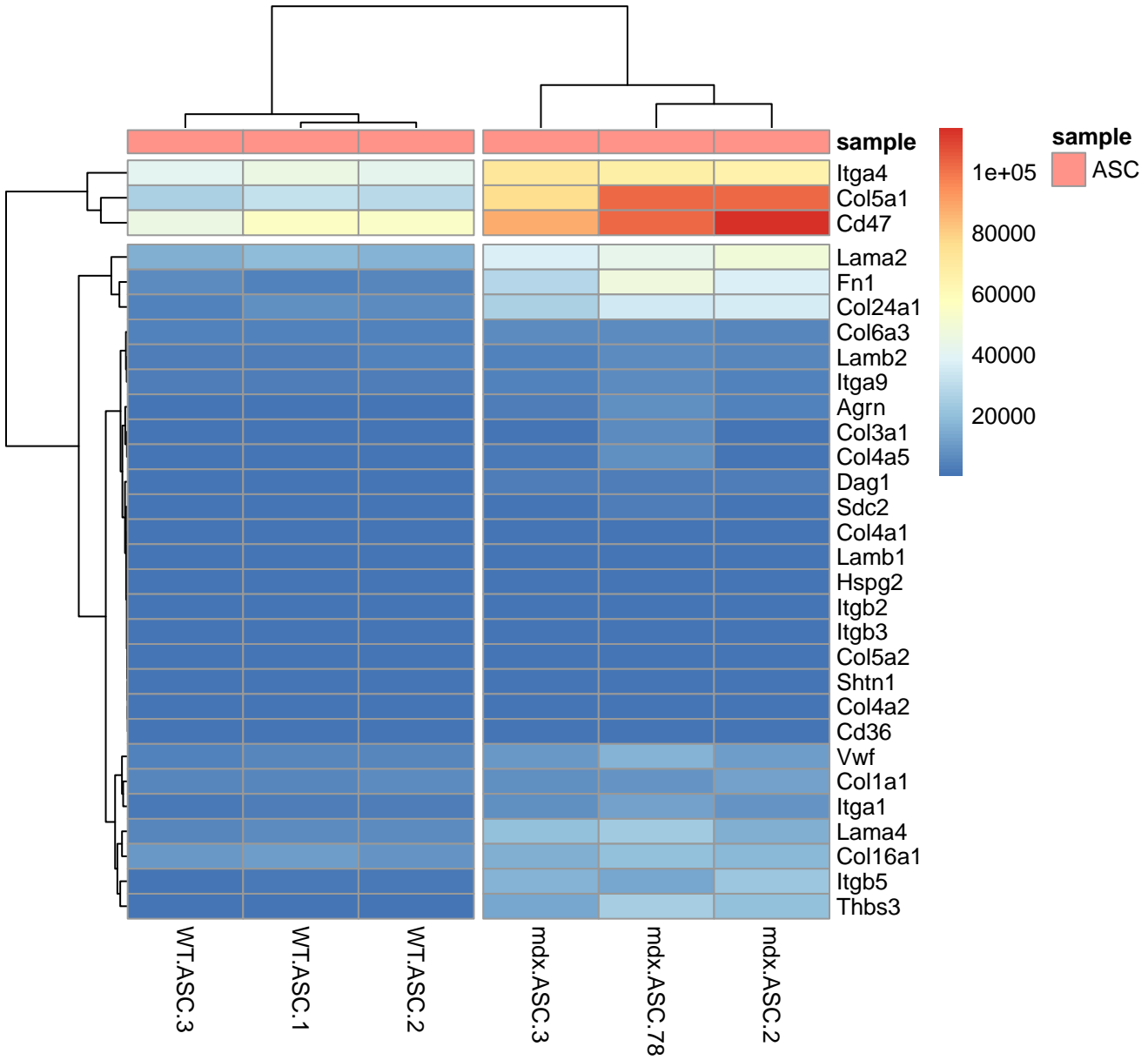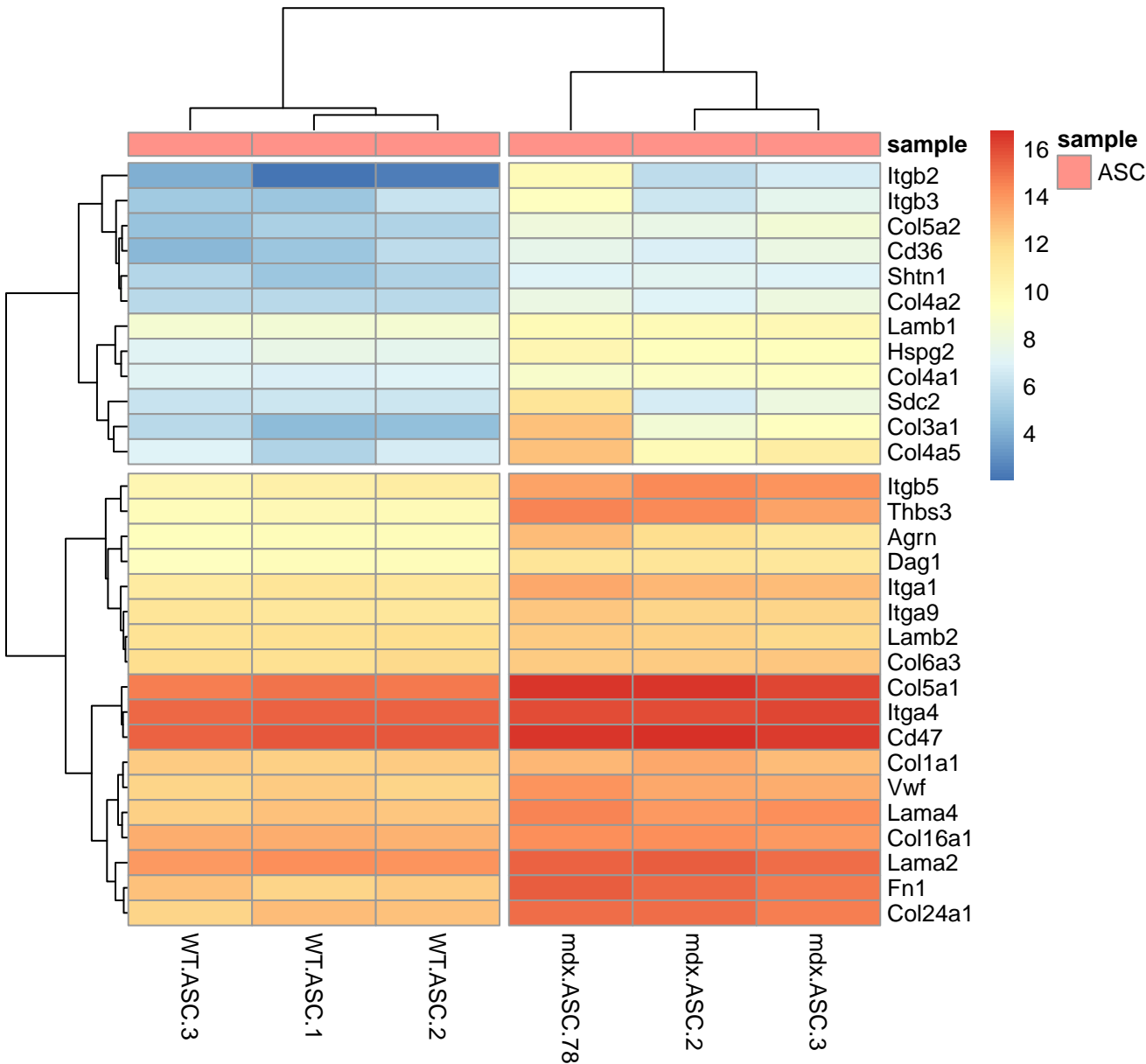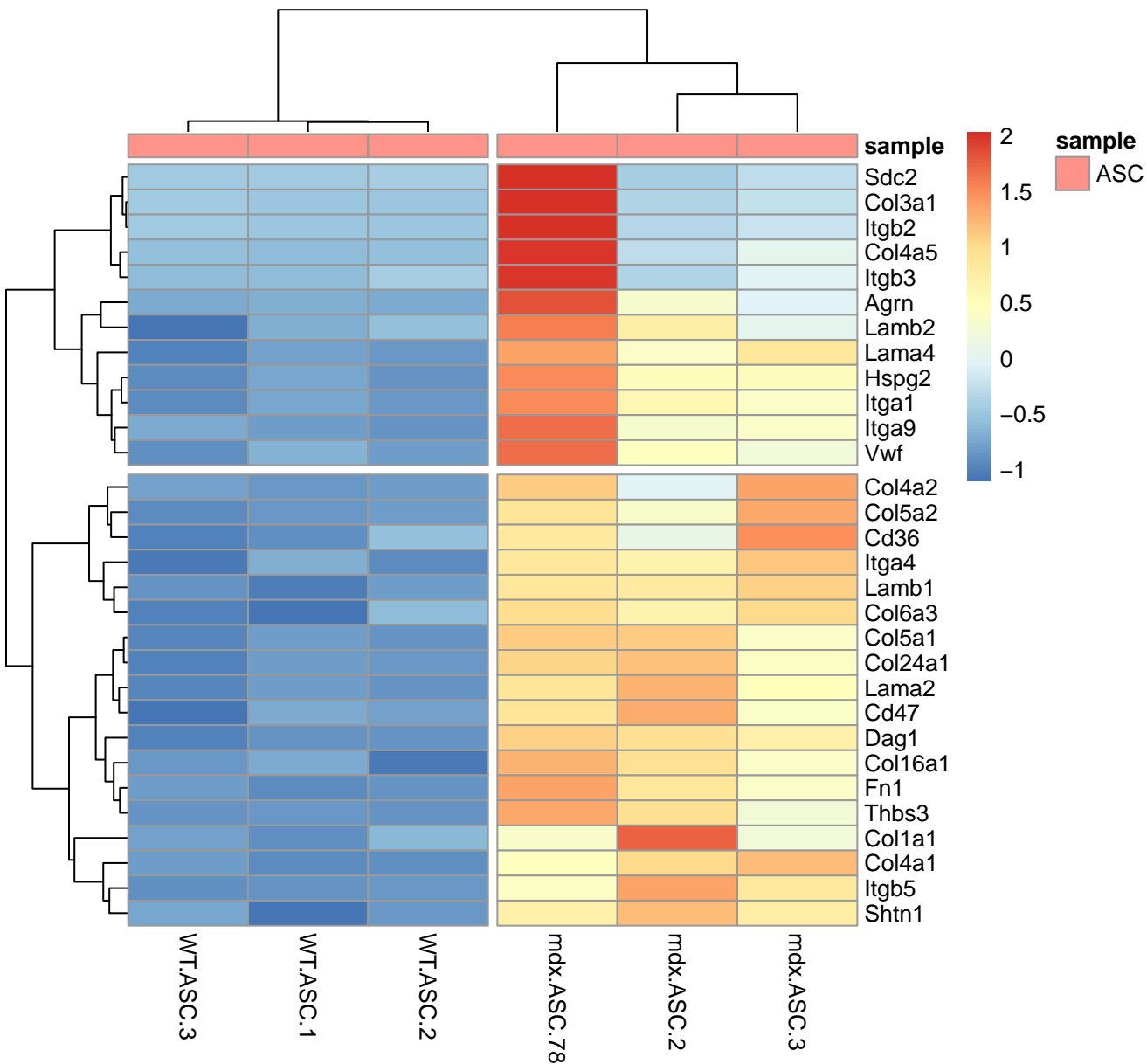**Scalling expressed matrix for genes active in KEGG_FOCAL_ADHESION**
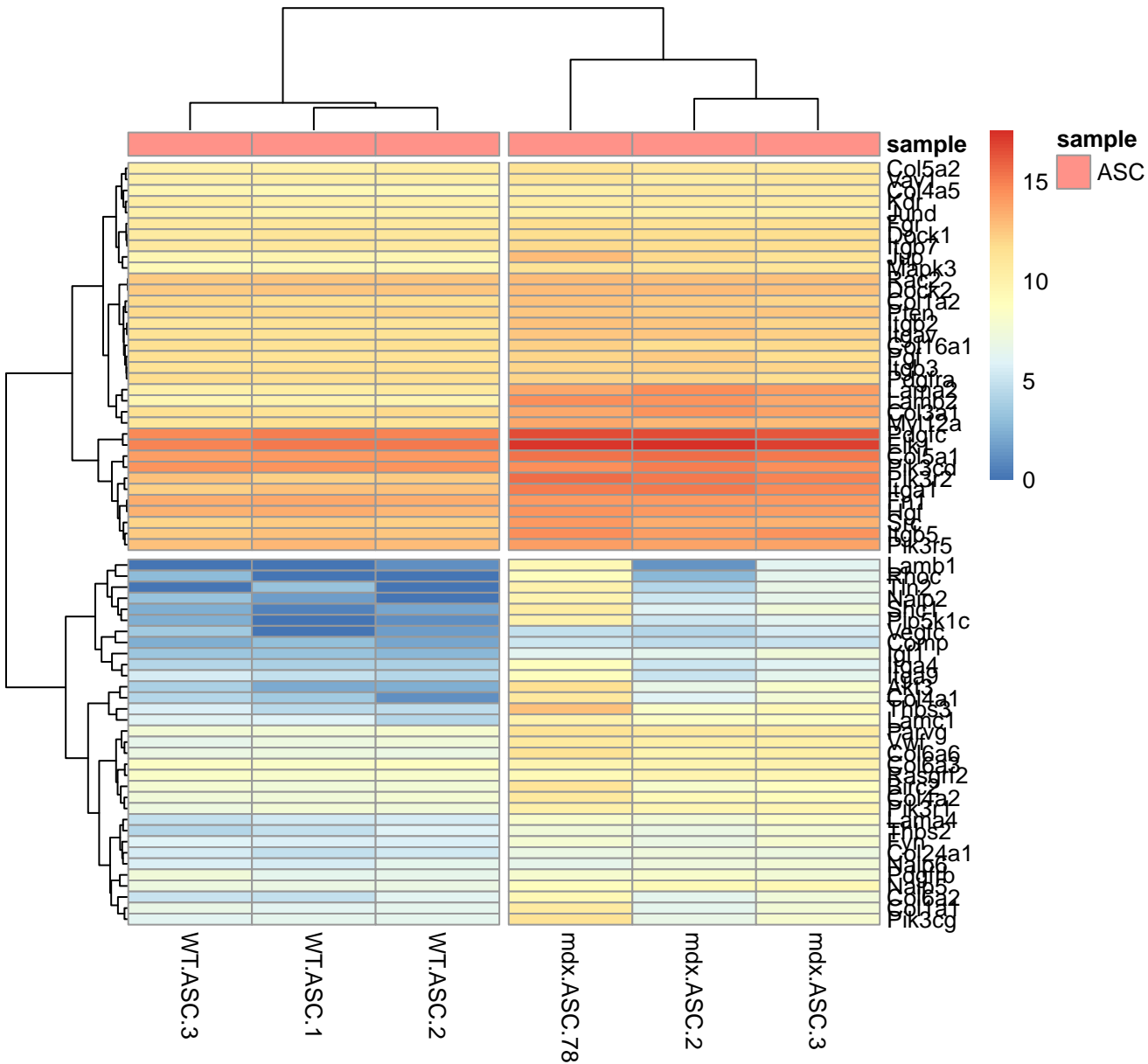
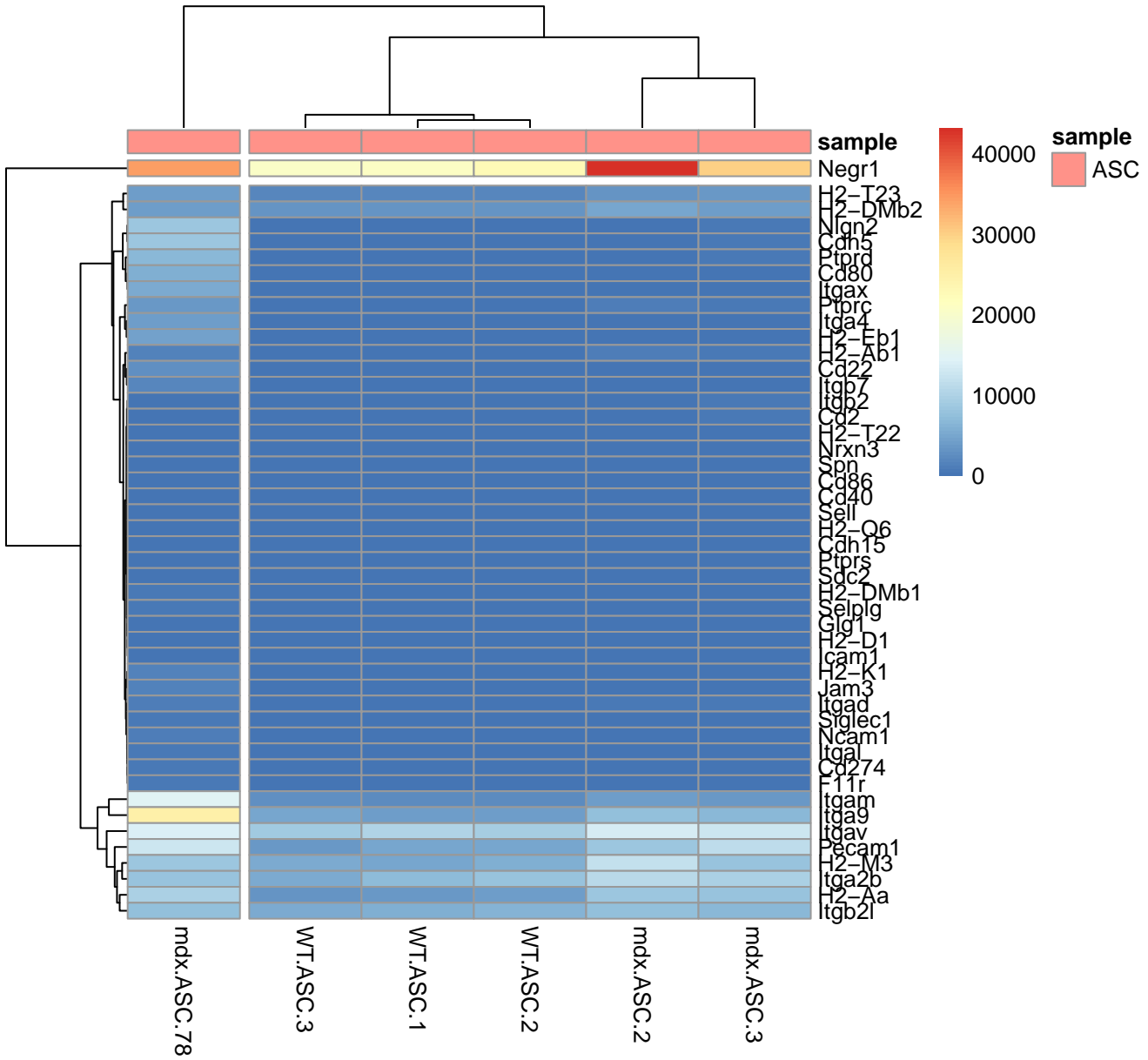**Expressed Matrix from Normalized for genes in KEGG_ECM_RECEPTOR_INTERACTION**

Expressed Matrix for genes active in
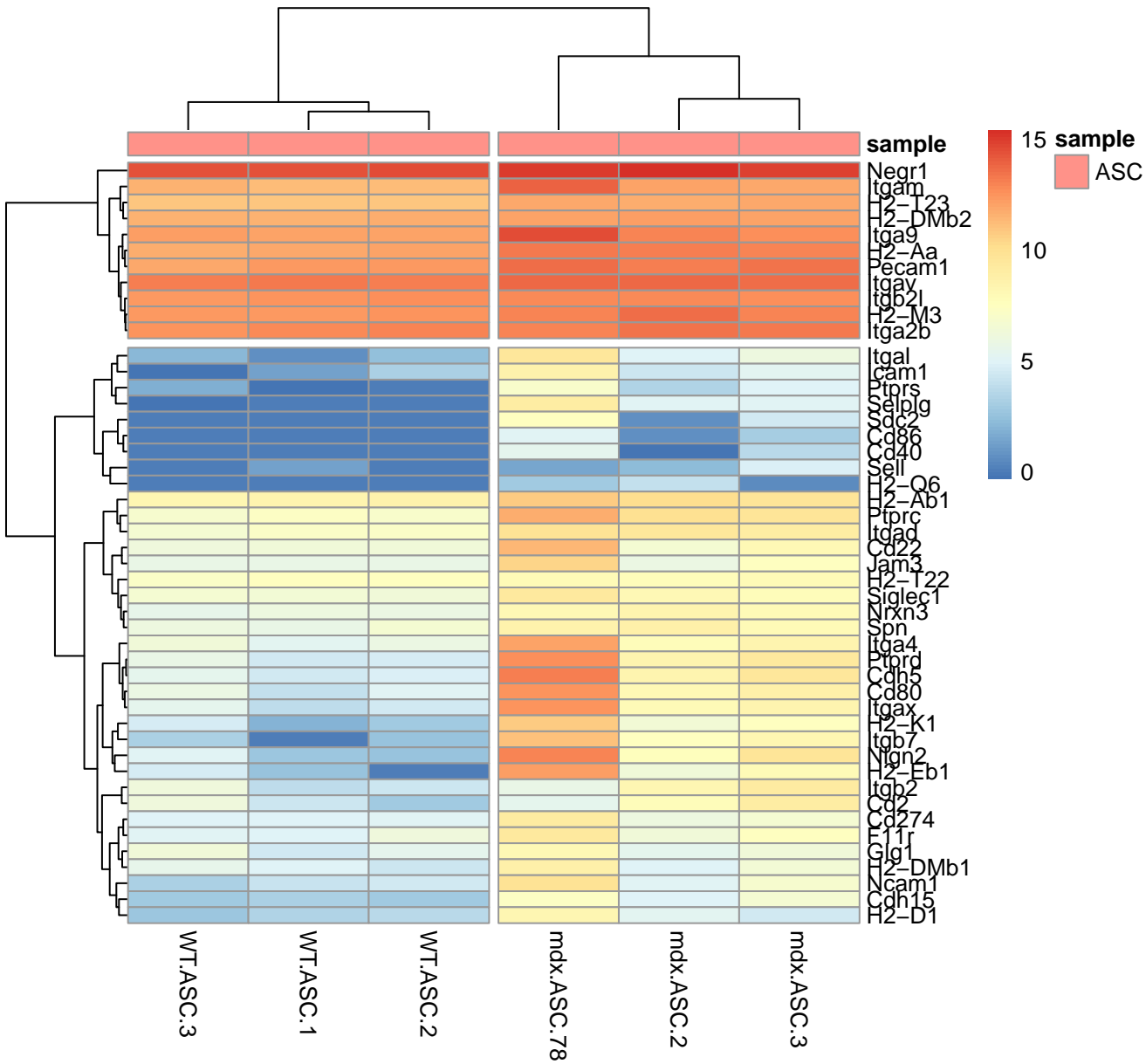# KEGG_ECM_RECEPTOR_INTERACTION

Scalling expressed matrix for genes active in KEGG_ECM_RECEPTOR_INTERACTION
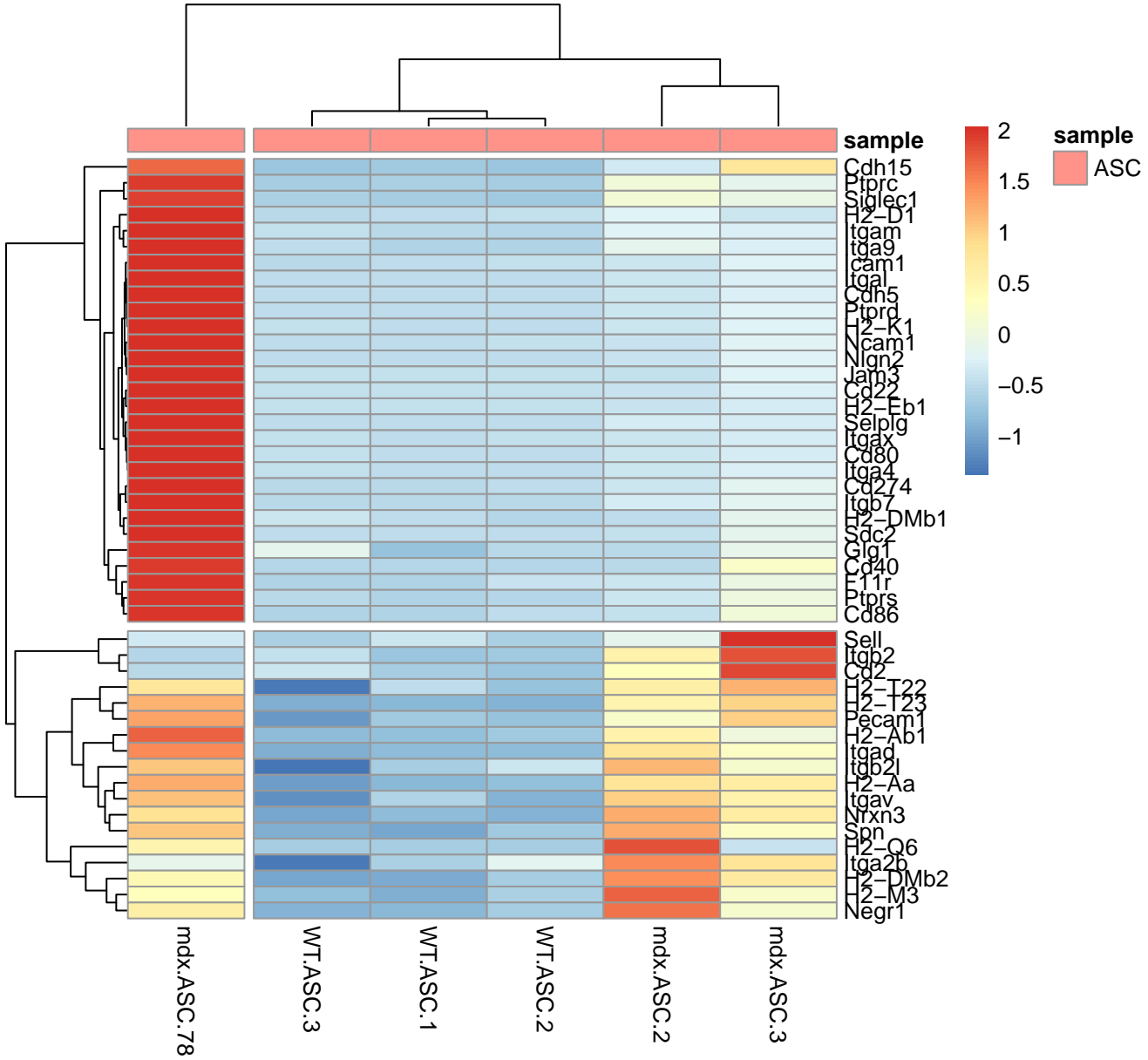
Expressed Matrix from Normalized for genes in KEGG_CELL_ADHESION_MOLECULES_CAMS
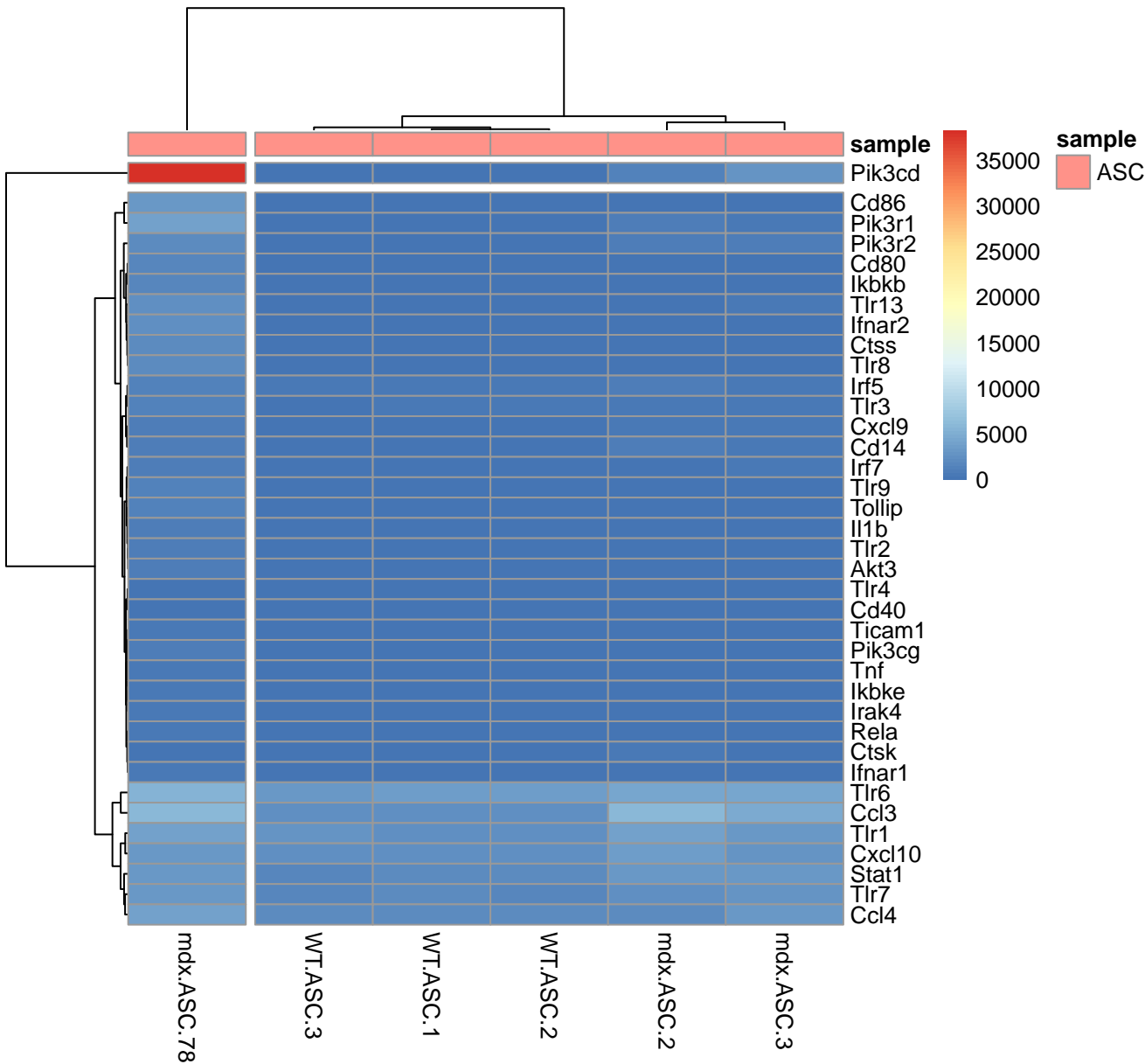
Expressed Matrix for genes active in
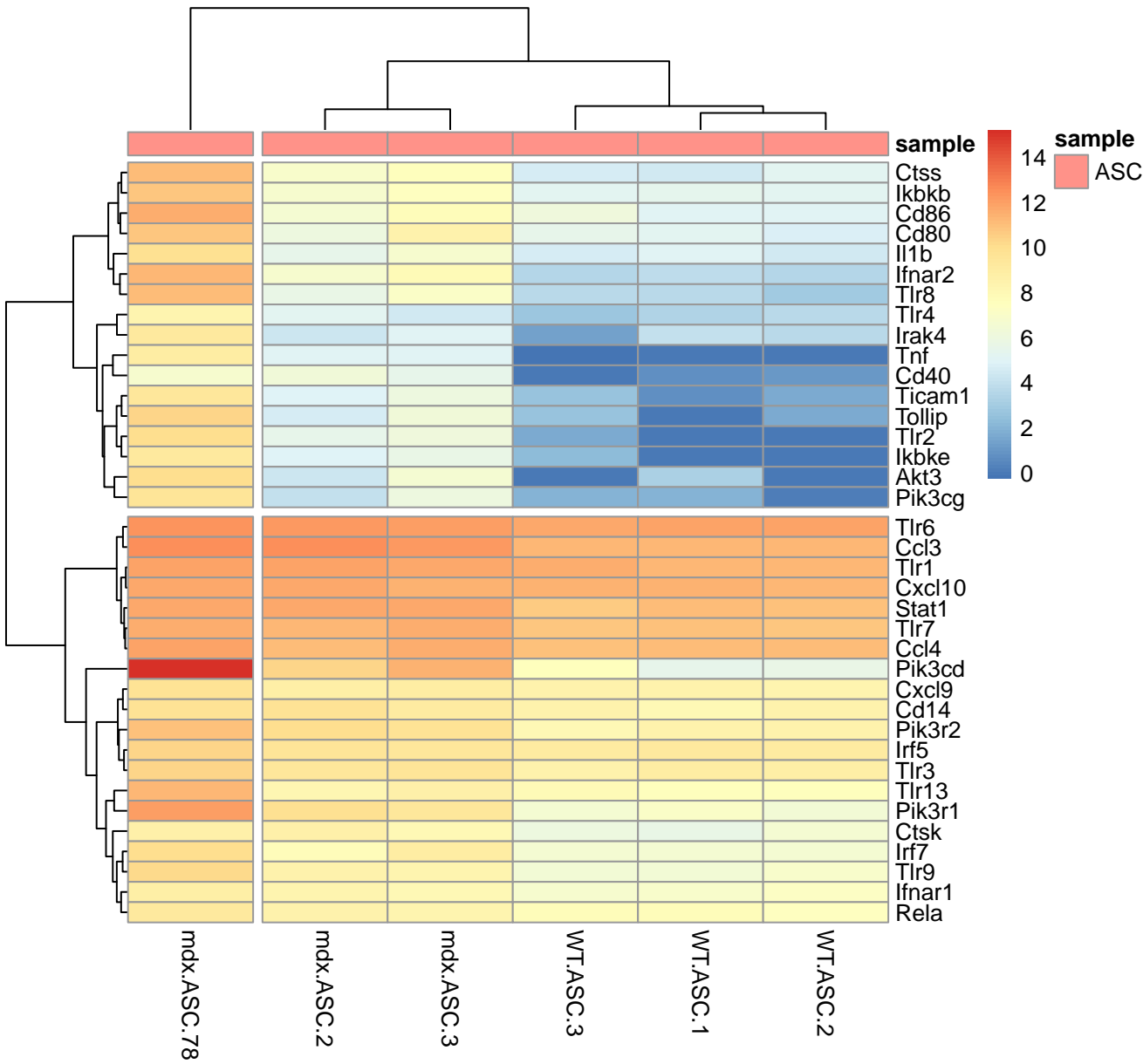KEGG_CELL_ADHESION_MOLECULES_CAMS

Scalling expressed matrix for genes active in KEGG_CELL_ADHESION_MOLECULES_CAMS
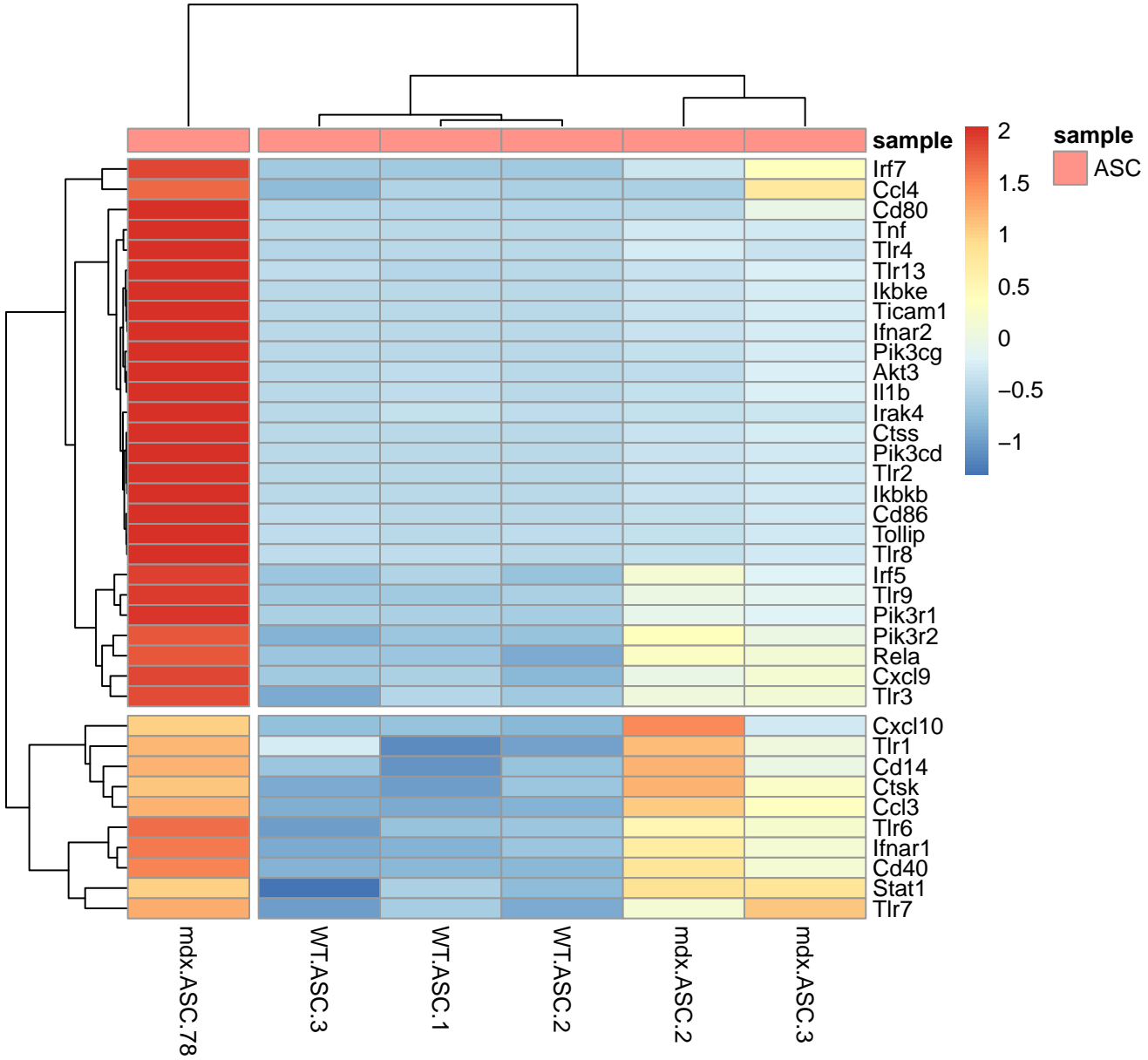
Expressed Matrix from Normalized for genes in
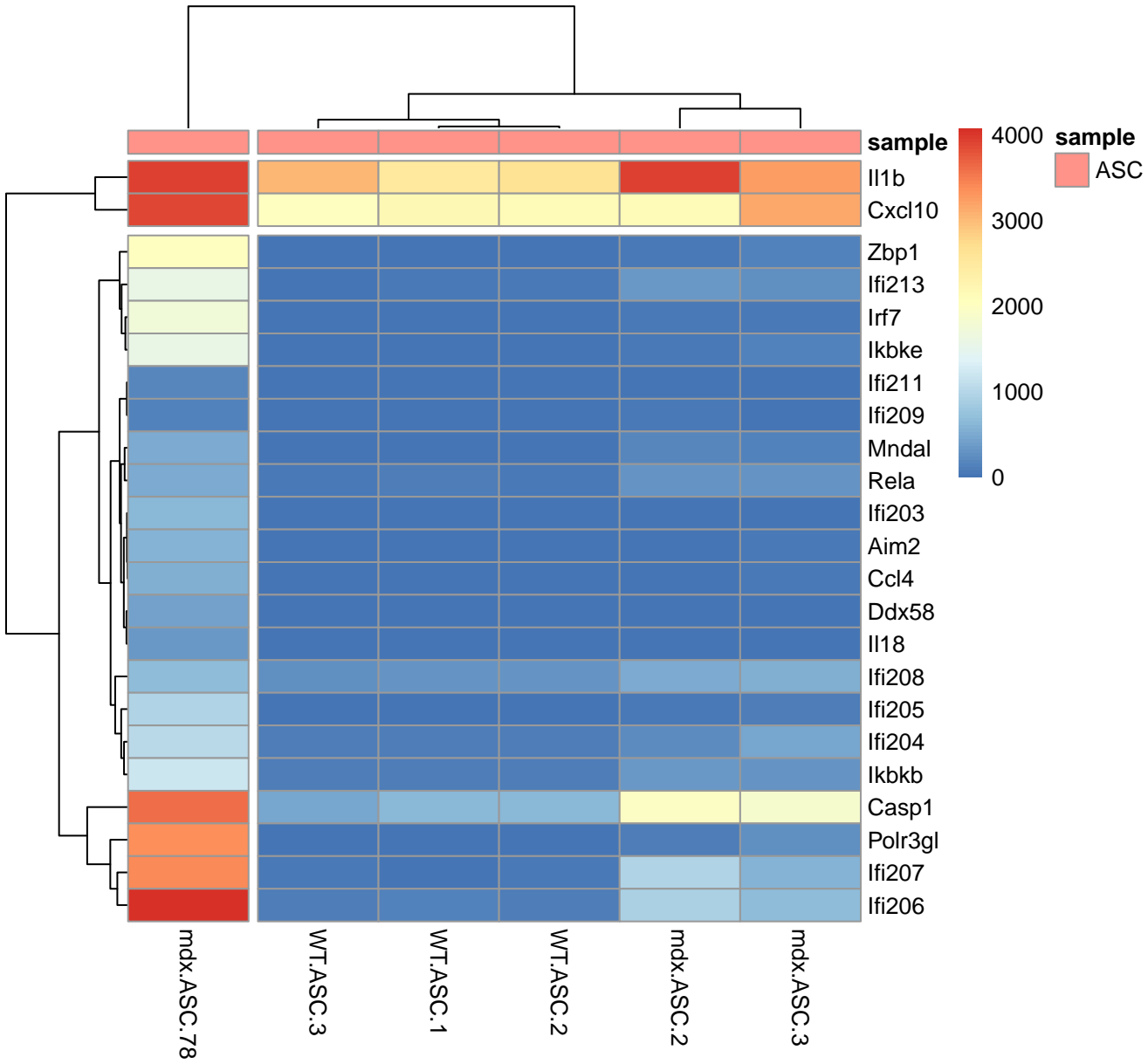**KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY**

Expressed Matrix for genes active in KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY
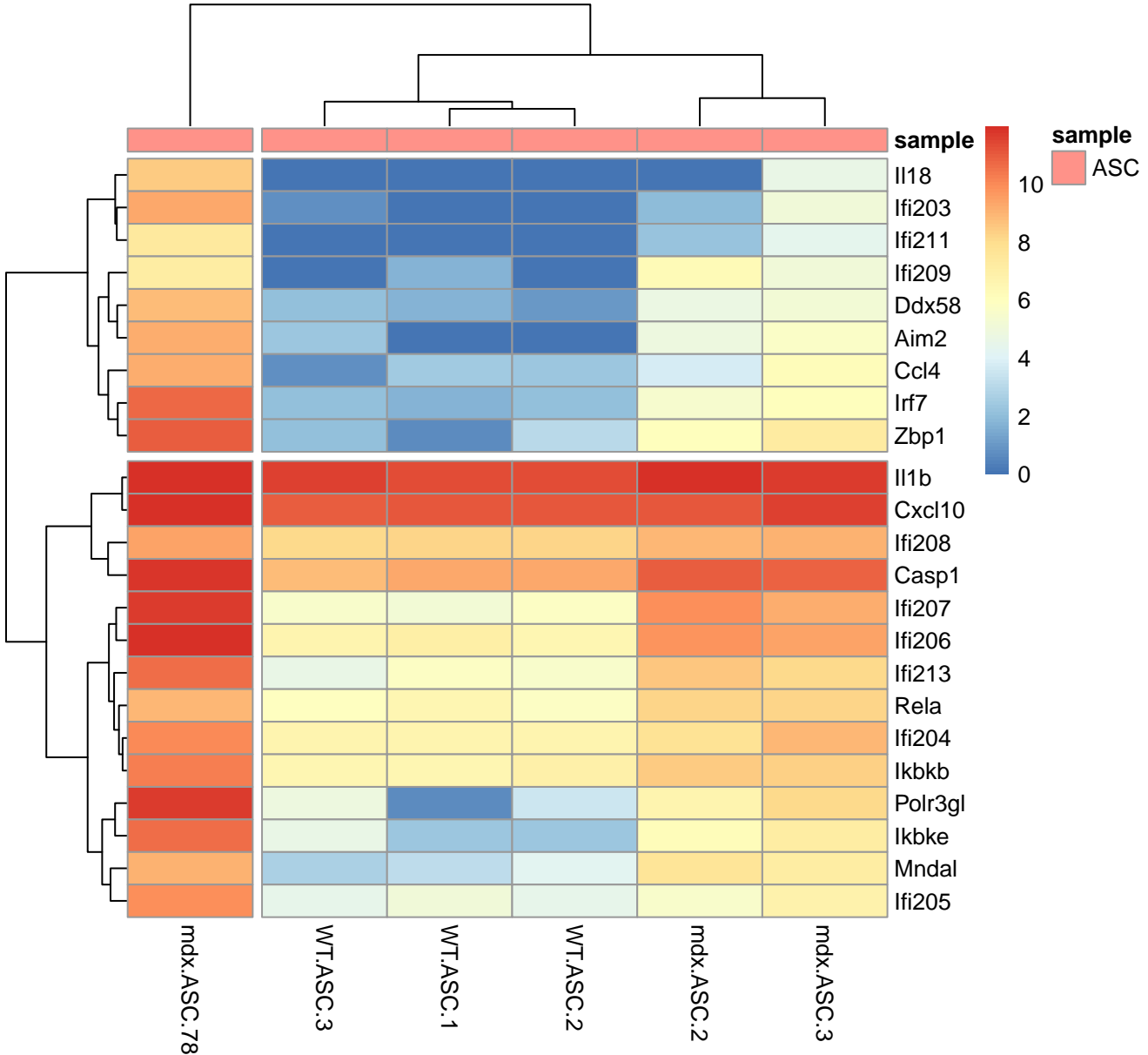
Scalling expressed matrix for genes active in KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY
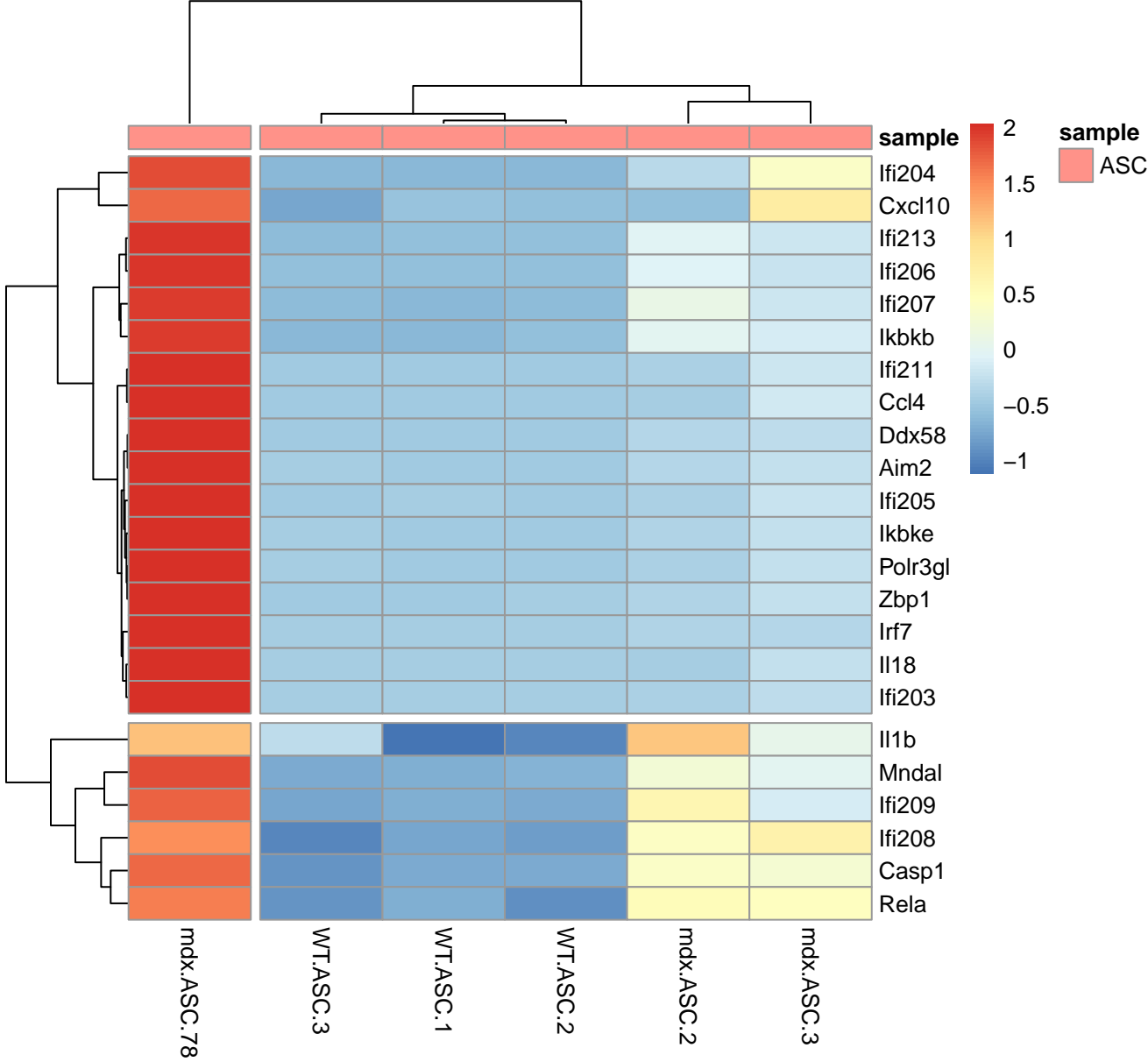
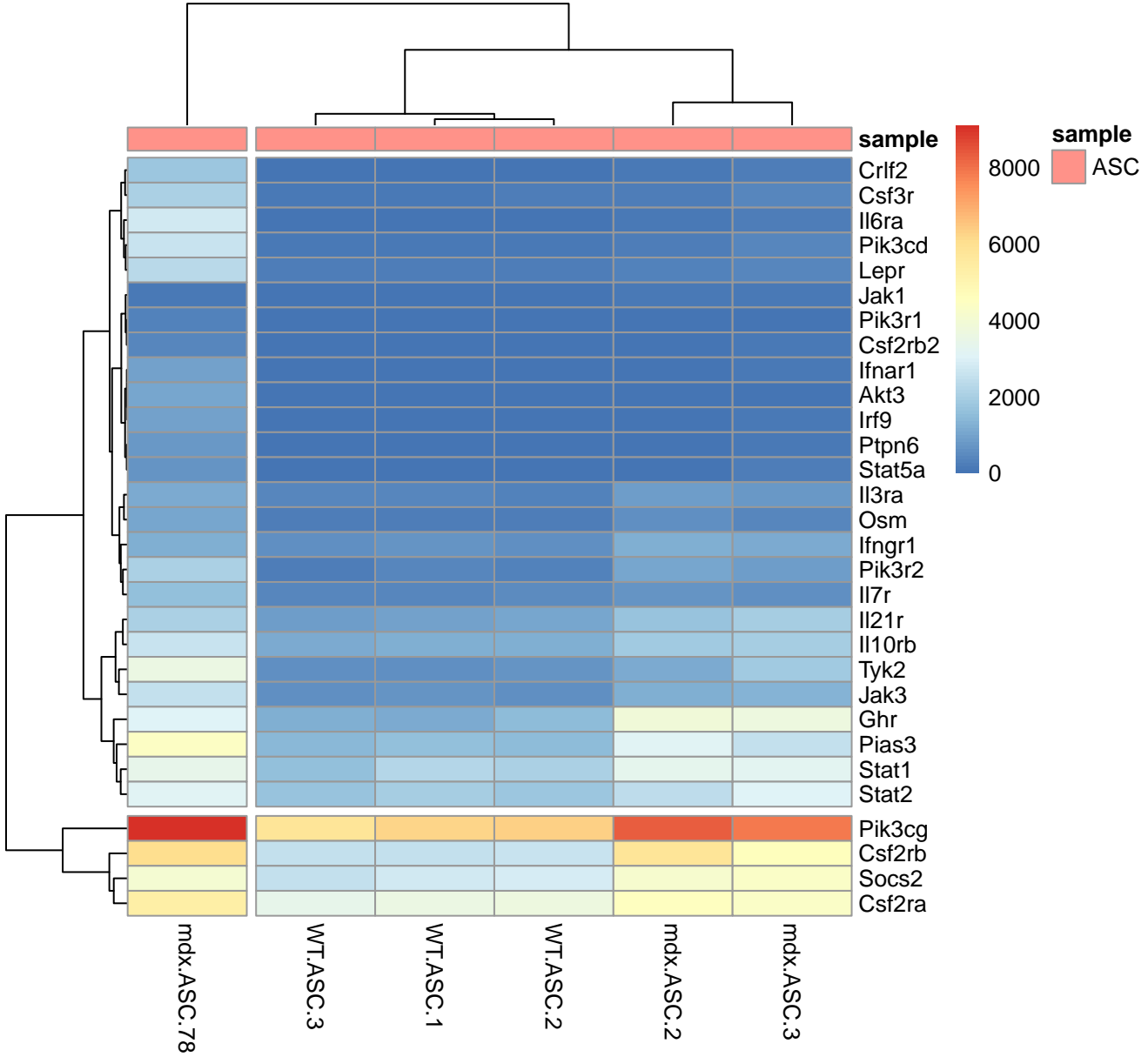**Expressed Matrix from Normalized for genes in KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY**

Expressed Matrix for genes active in
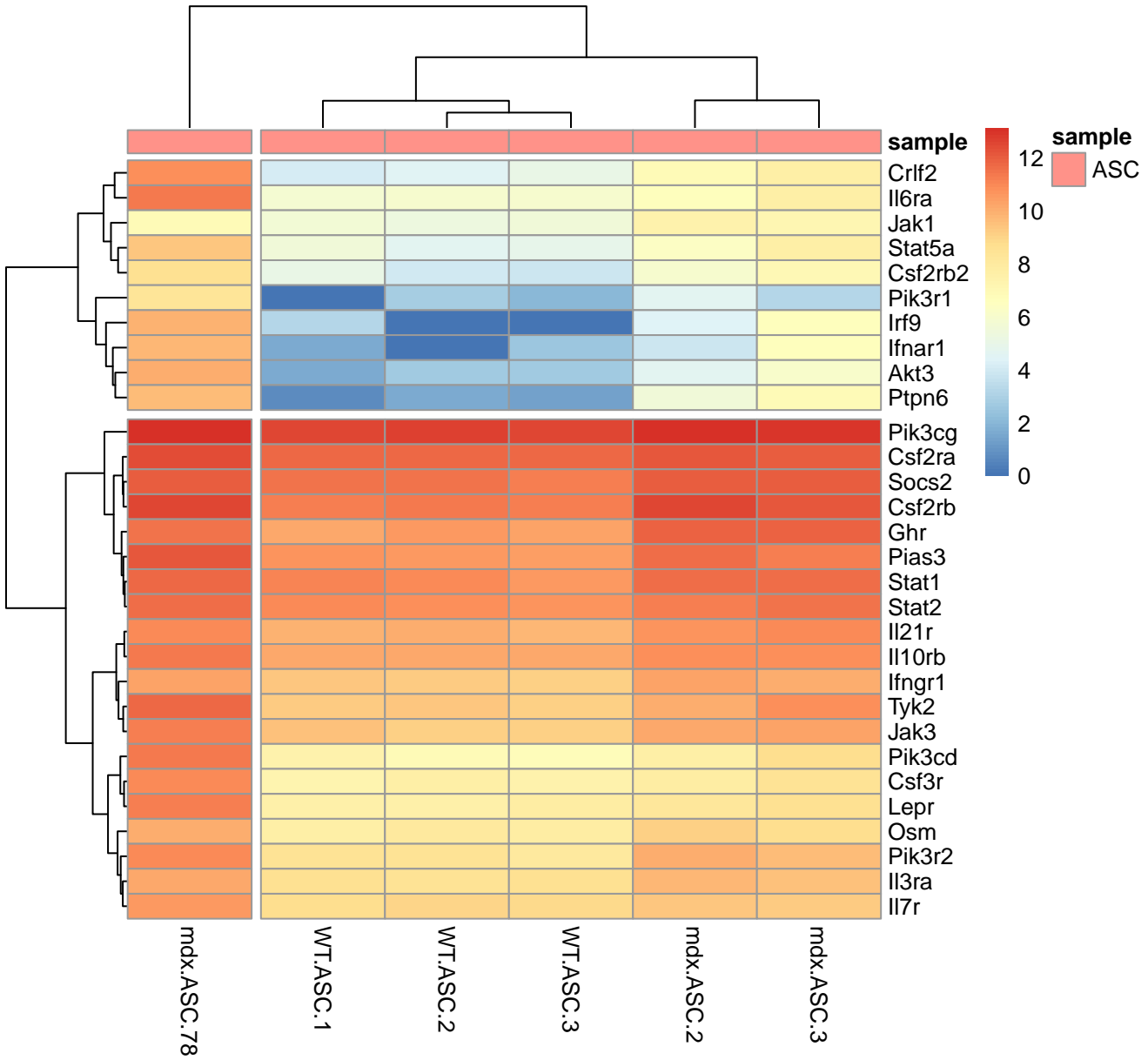# KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY

Scalling expressed matrix for genes active in
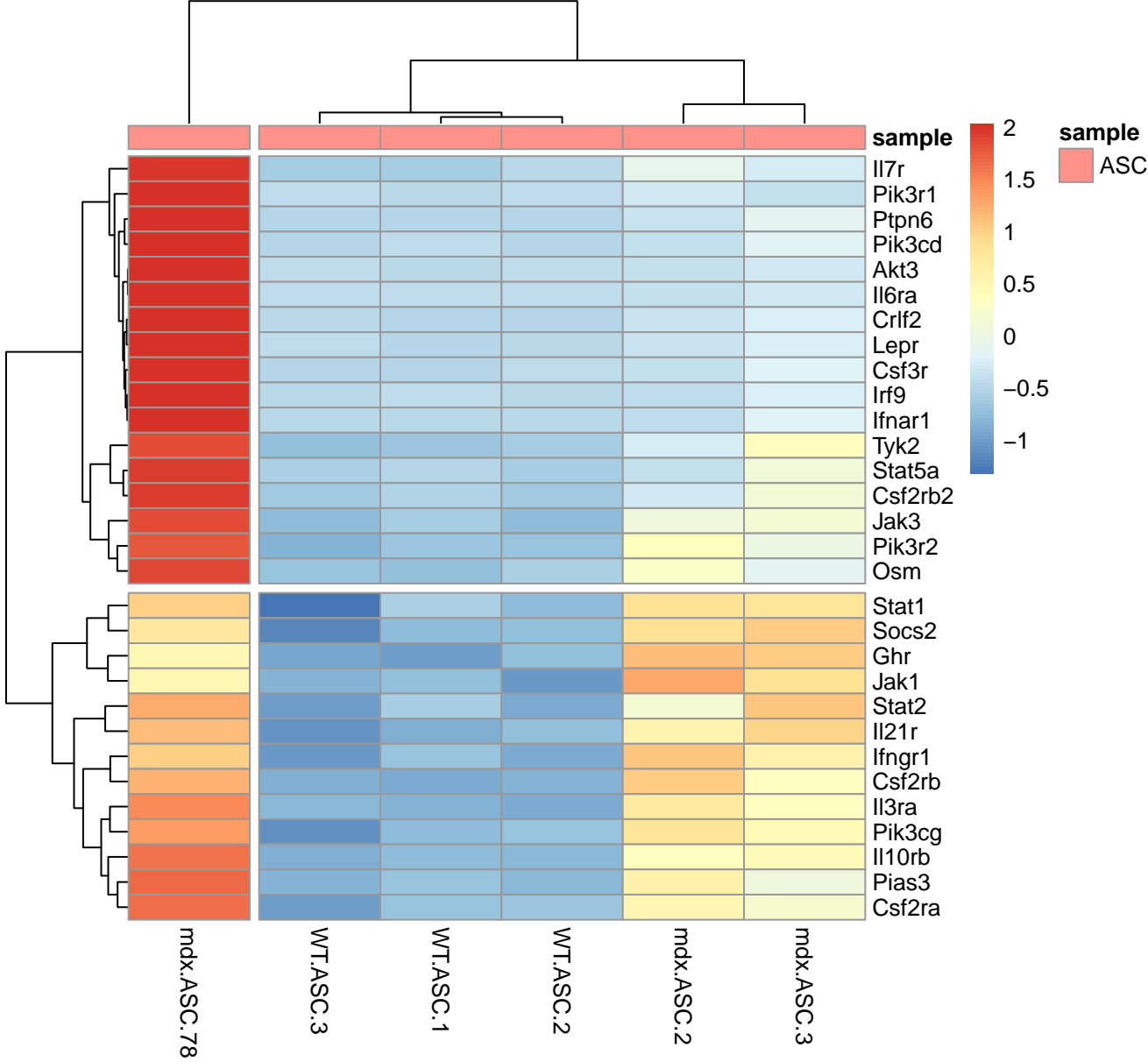# KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY

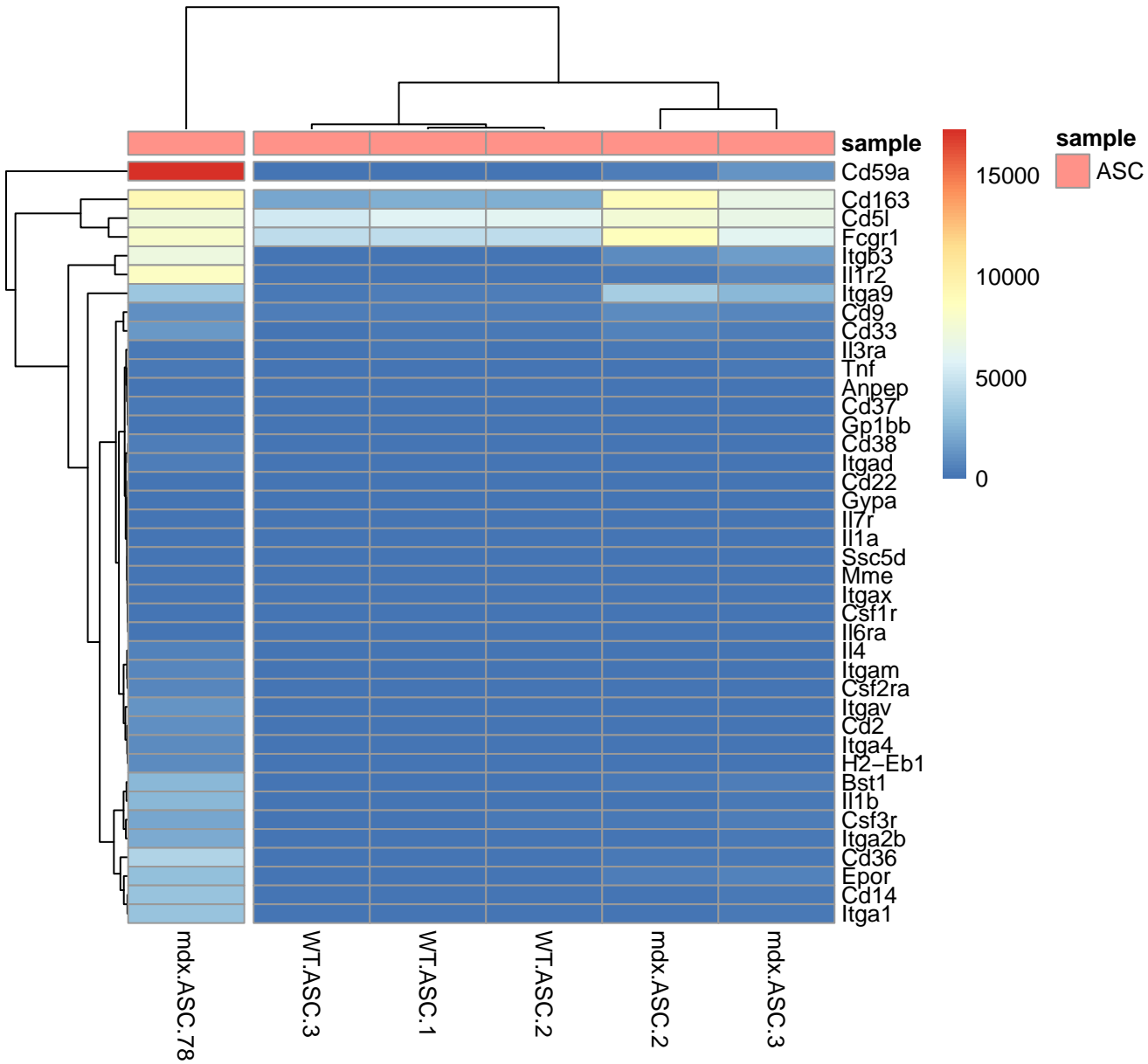**Expressed Matrix from Normalized for genes in KEGG_JAK_STAT_SIGNALING_PATHWAY**

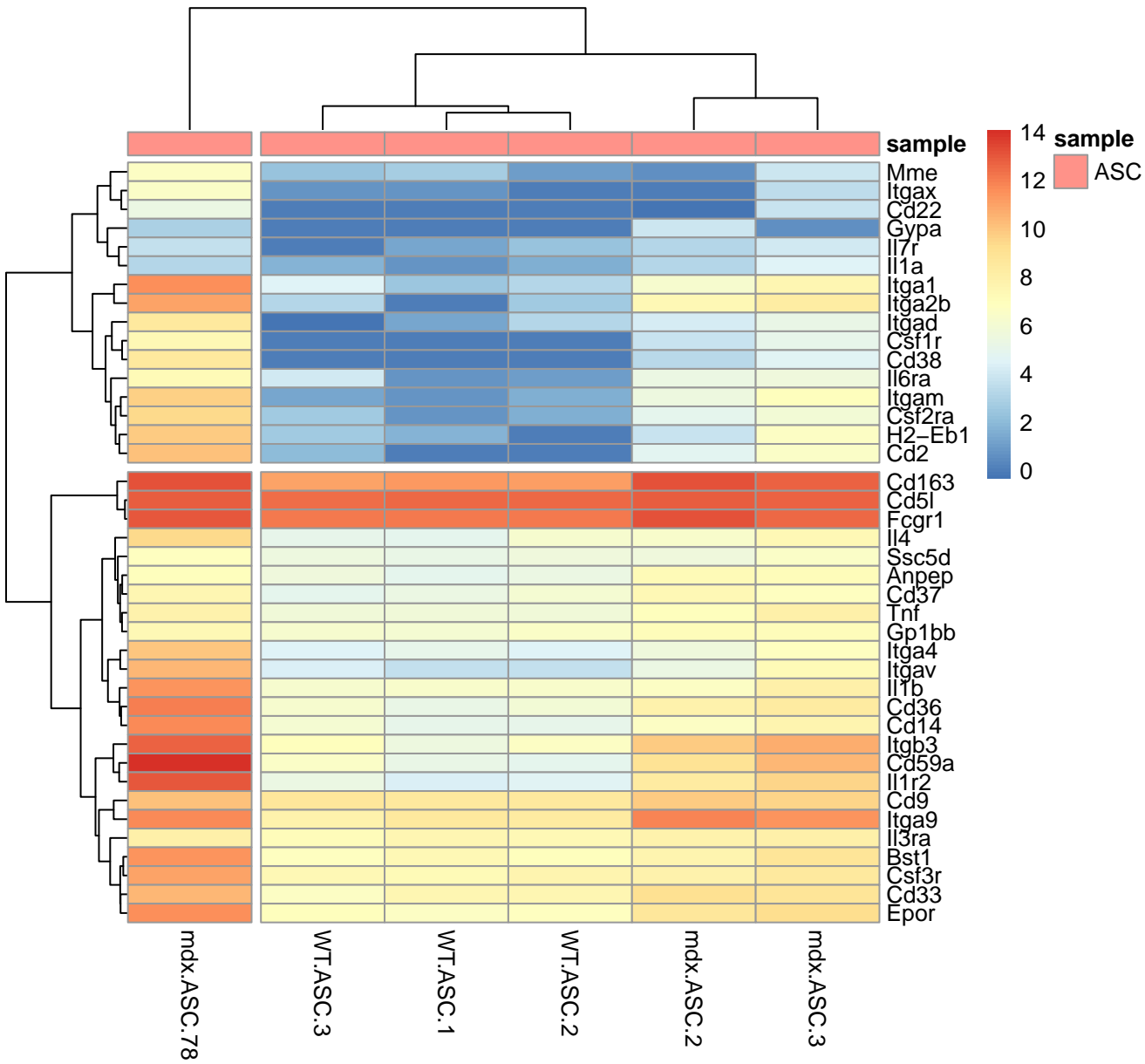**Expressed Matrix for genes active in KEGG_JAK_STAT_SIGNALING_PATHWAY**

Scalling expressed matrix for genes active in KEGG_JAK_STAT_SIGNALING_PATHWAY
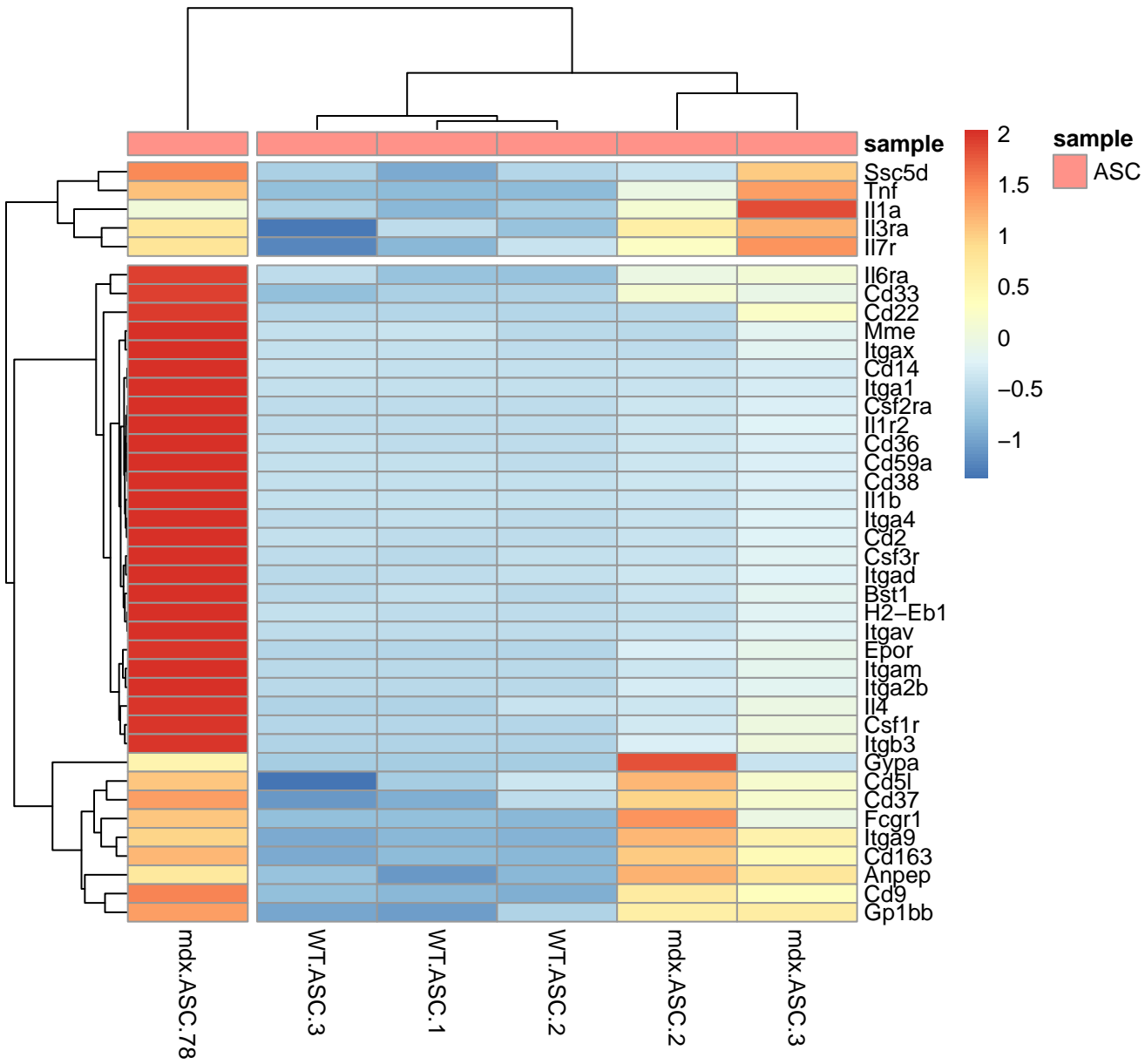
Expressed Matrix from Normalized for genes in
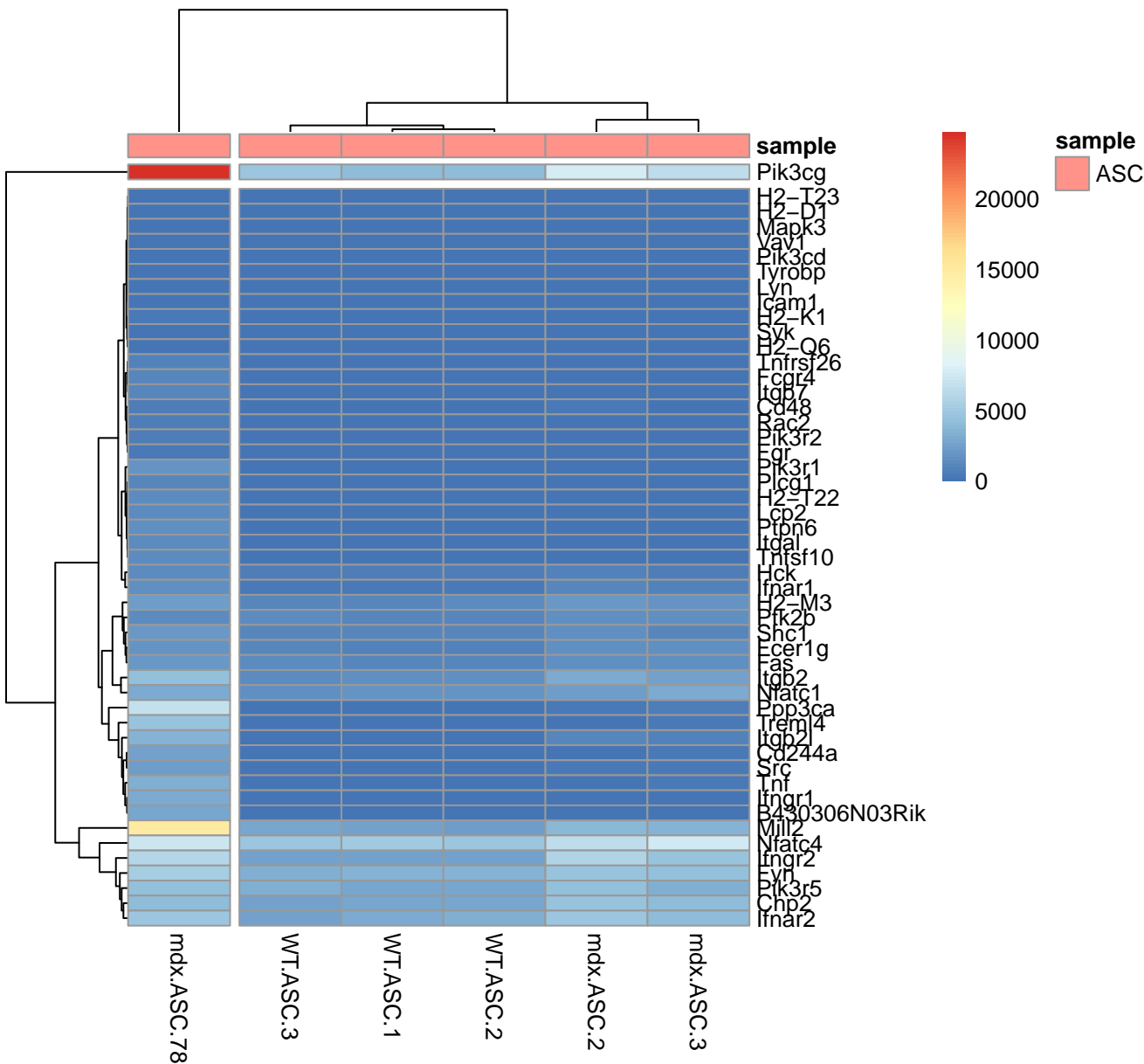## KEGG_HEMATOPOIETIC_CELL_LINEAGE

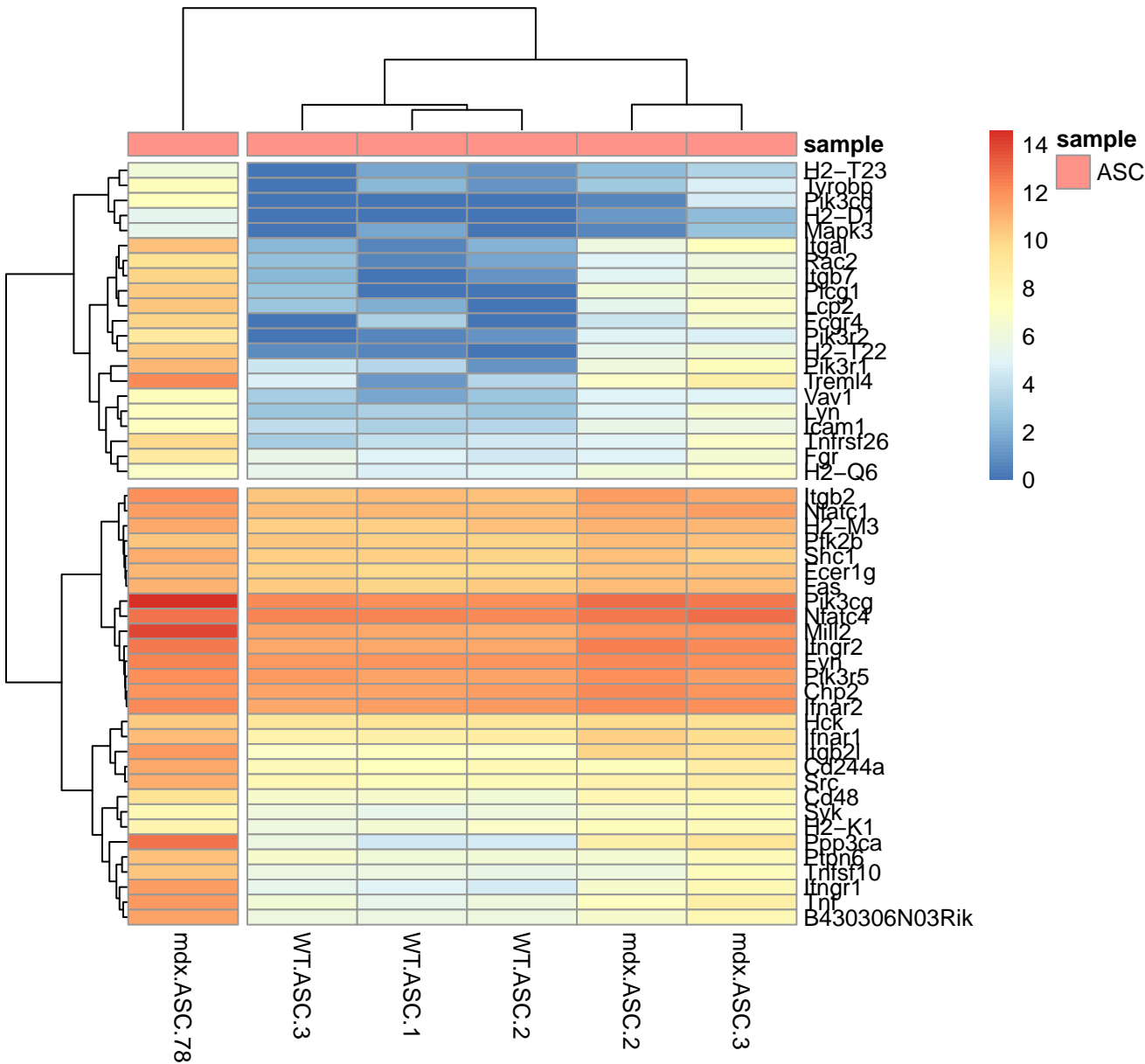**Expressed Matrix for genes active in
KEGG_HEMATOPOIETIC_CELL_LINEAGE**

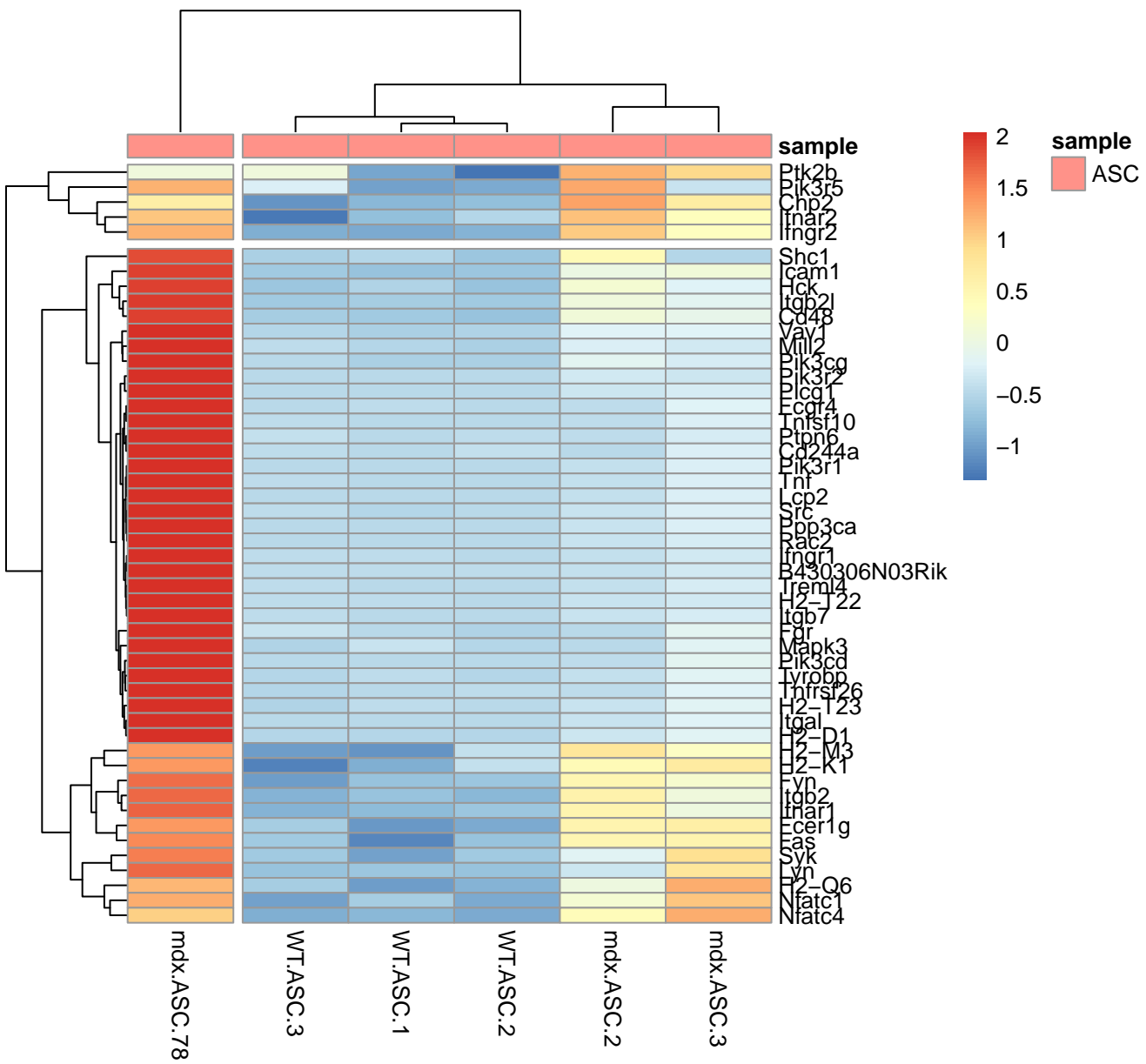**Scalling expressed matrix for genes active in KEGG_HEMATOPOIETIC_CELL_LINEAGE**

Expressed Matrix from Normalized for genes in
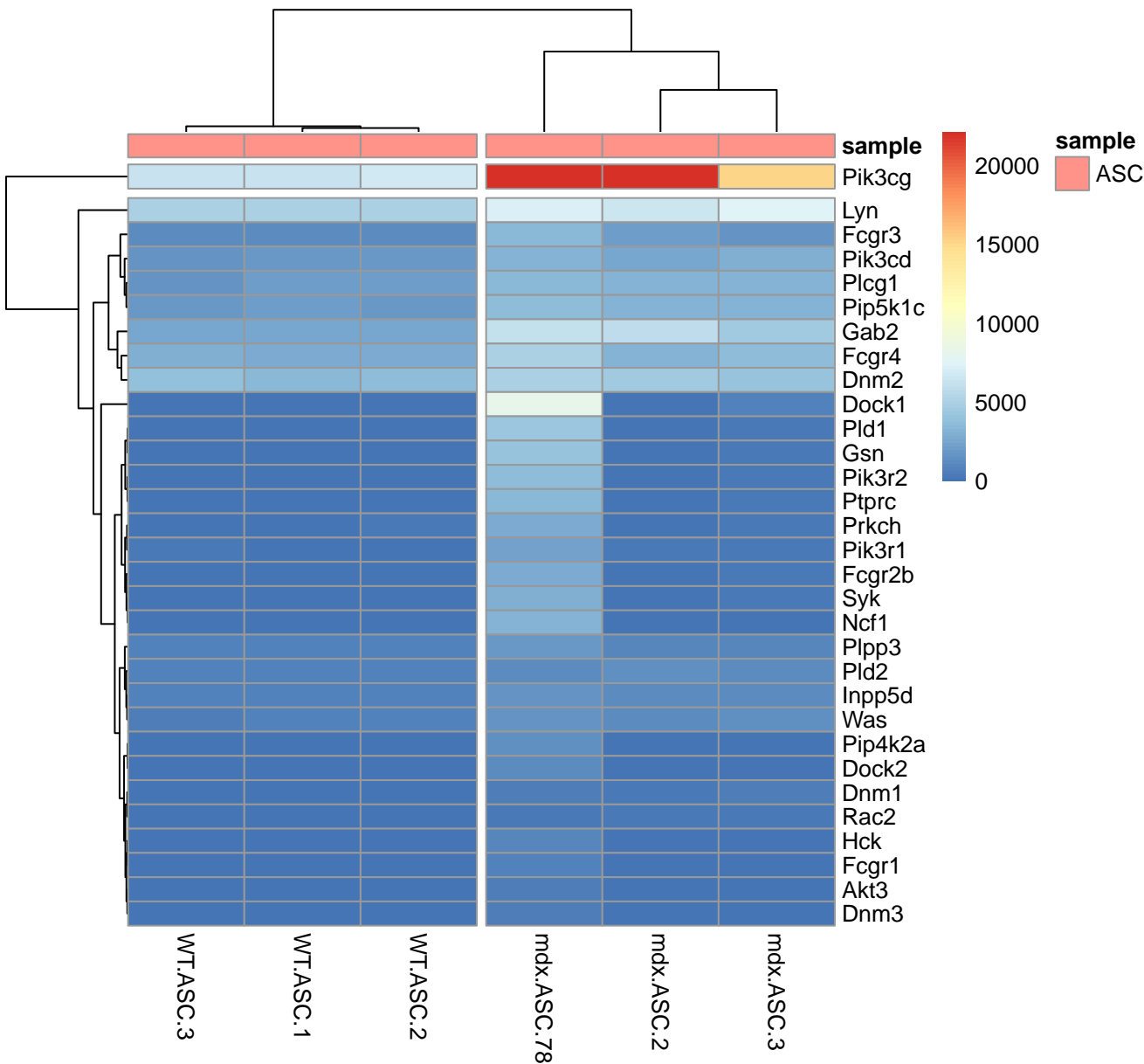**KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY**

Expressed Matrix for genes active in
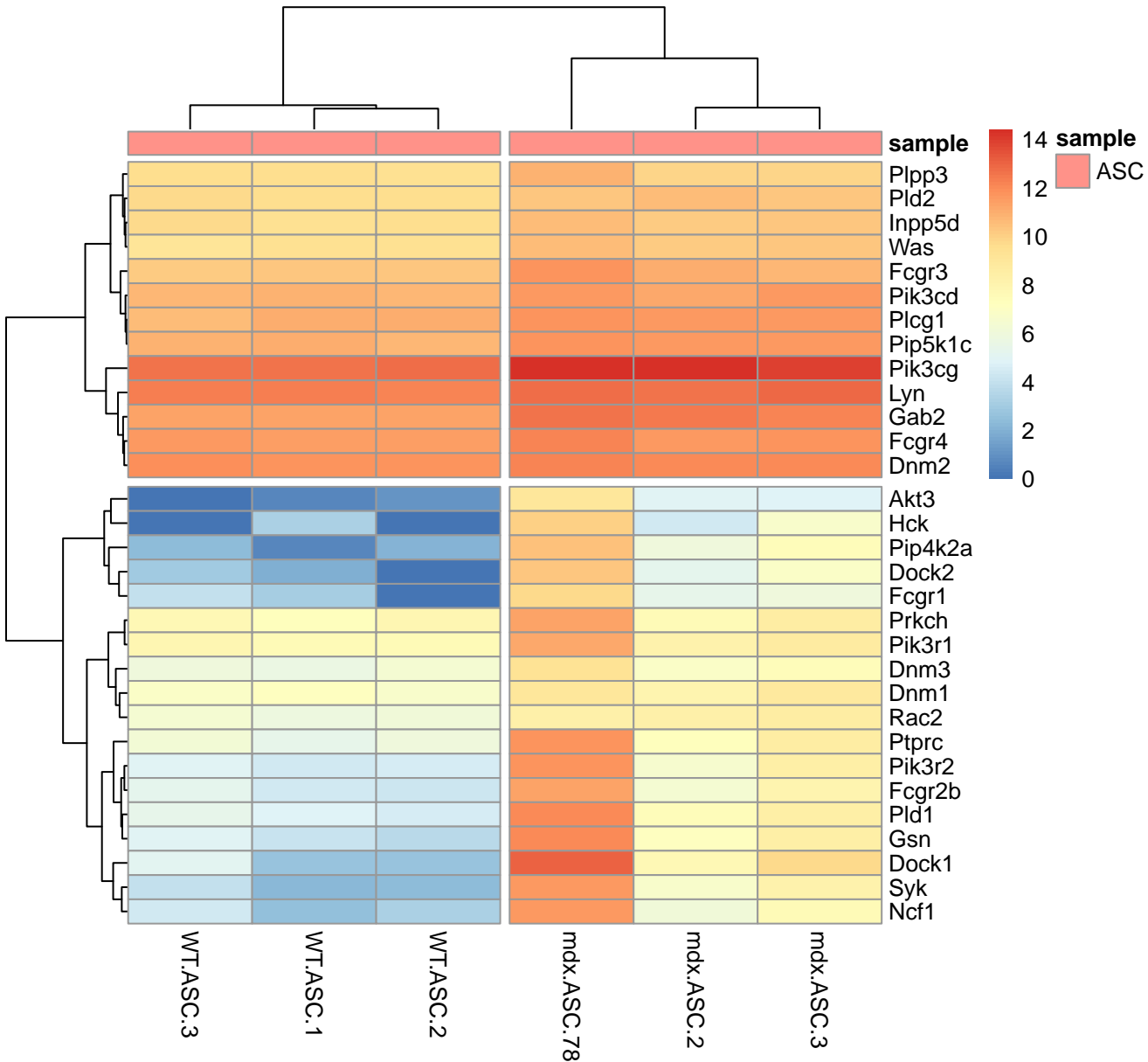**KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY**

Scalling expressed matrix for genes active in
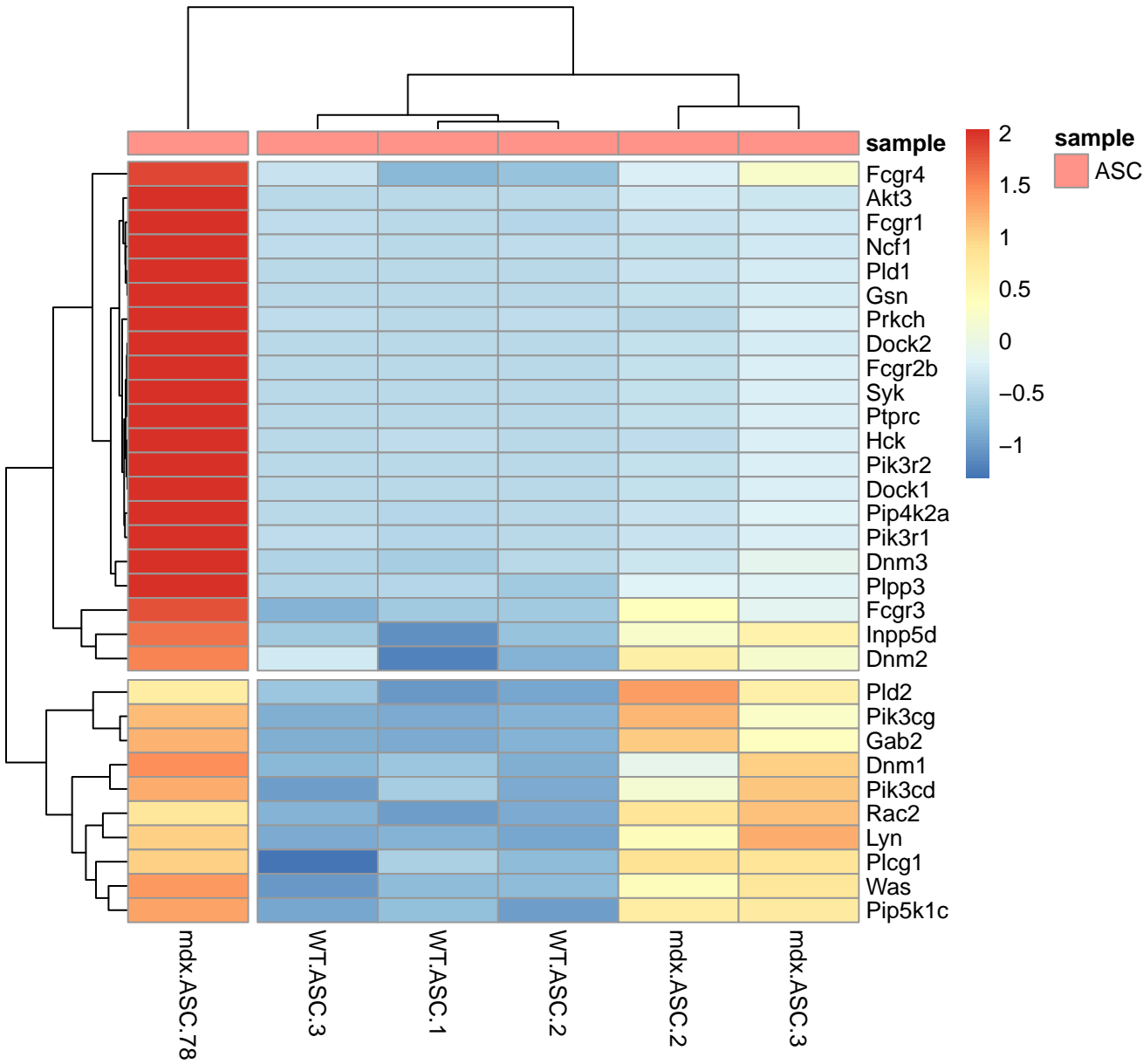**KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY**

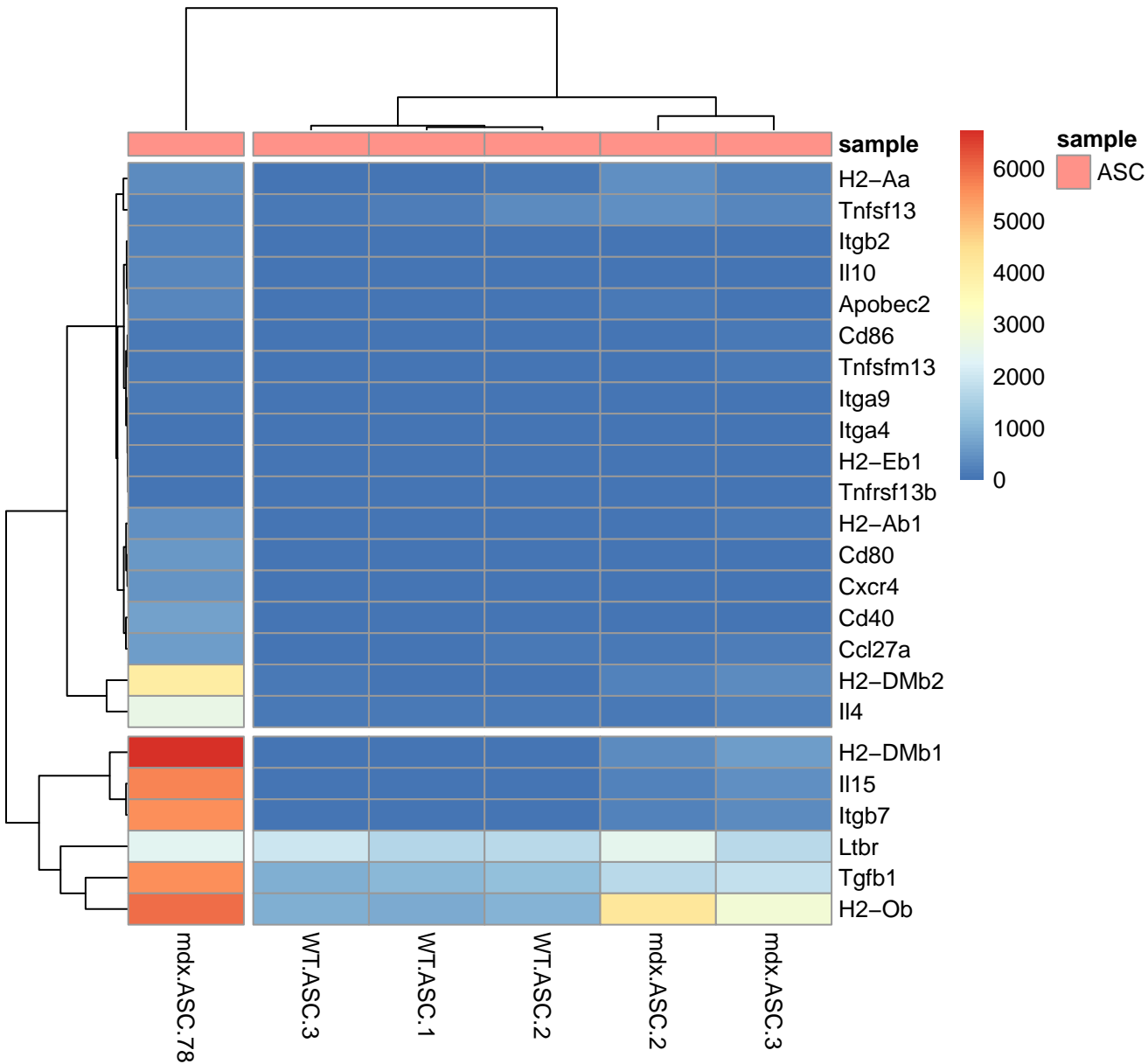**Expressed Matrix from Normalized for genes in KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS**

Expressed Matrix for genes active in
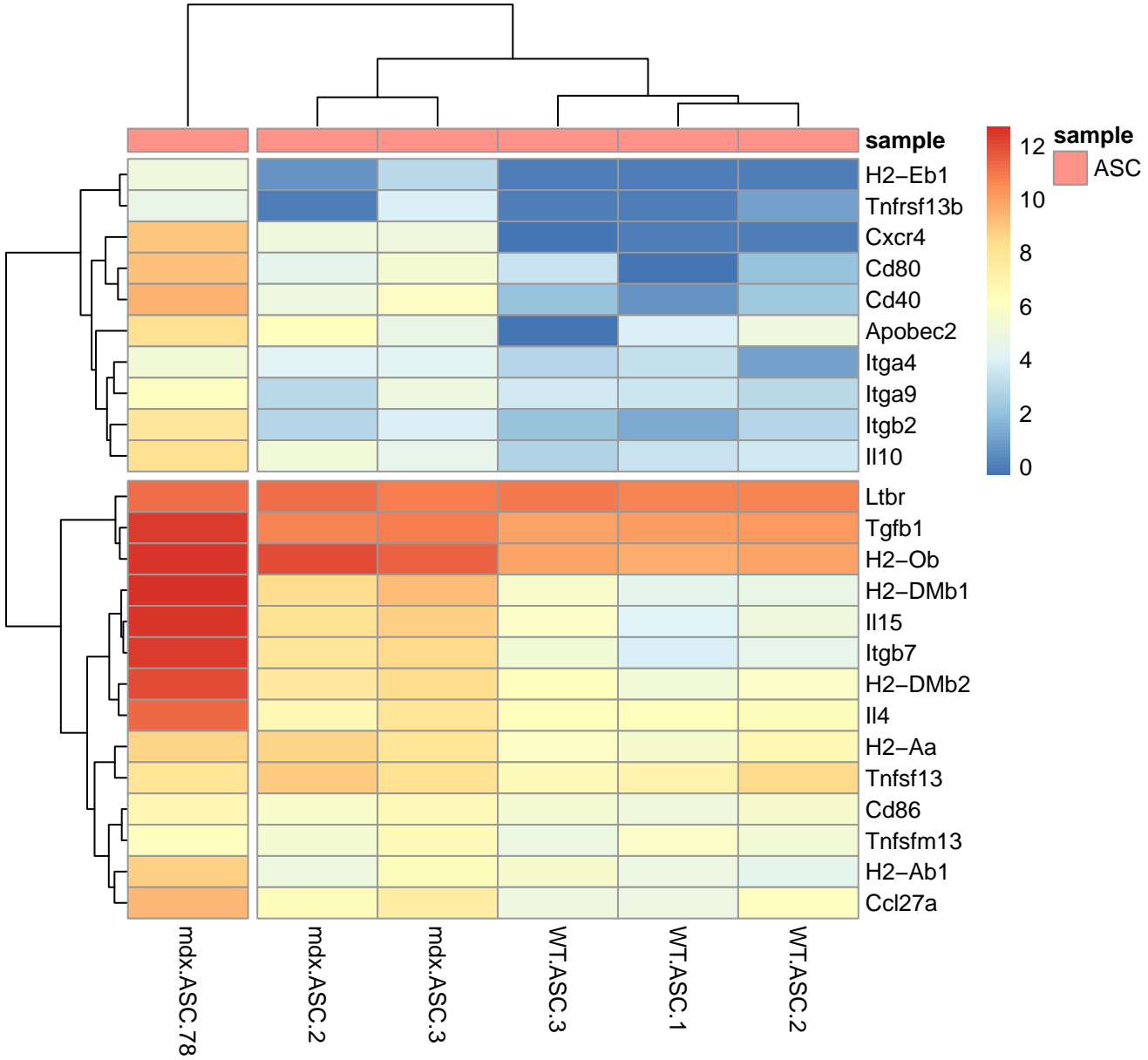**KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS**

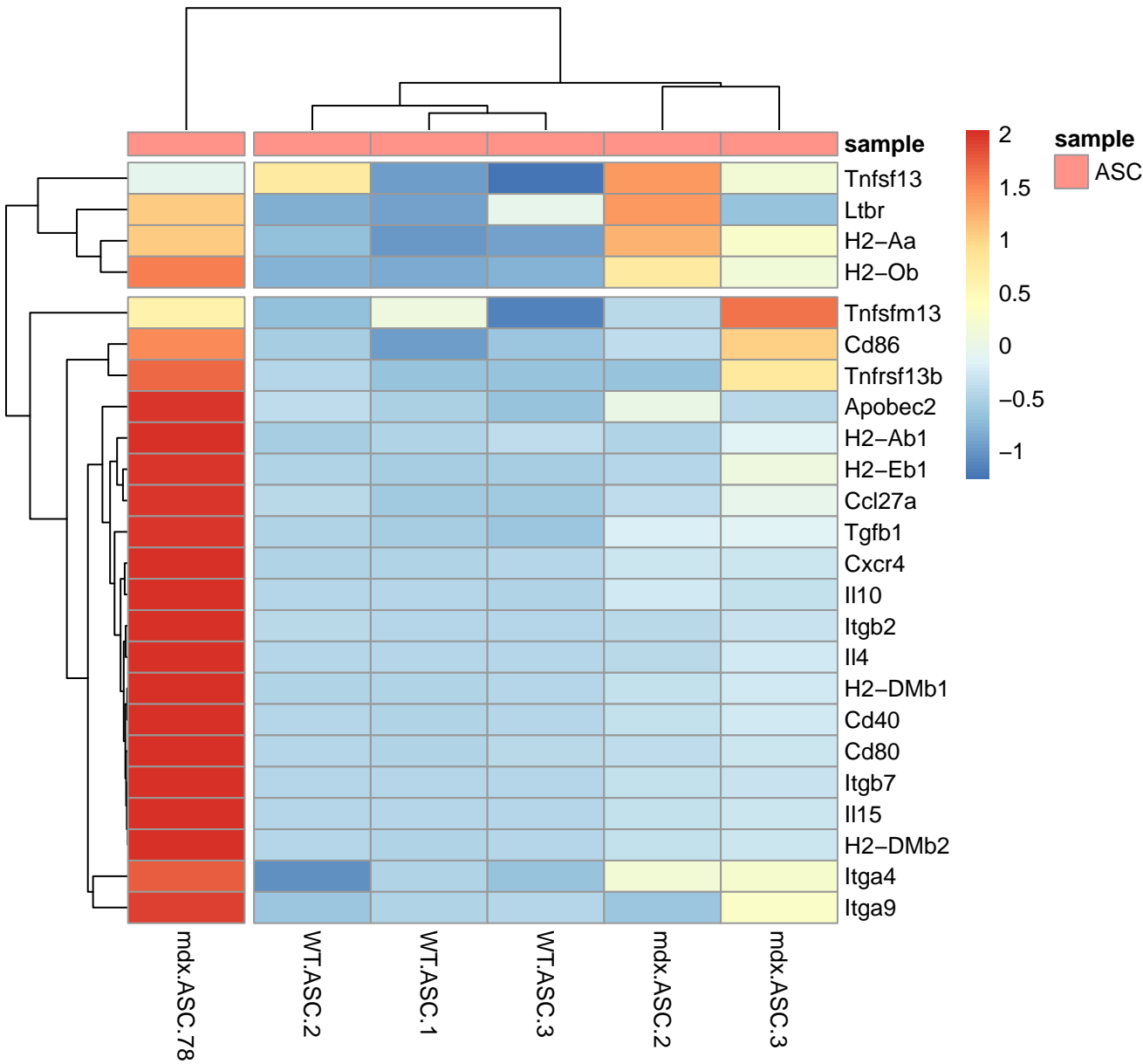**Scalling expressed matrix for genes active in KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS**

Expressed Matrix from Normalized for genes in
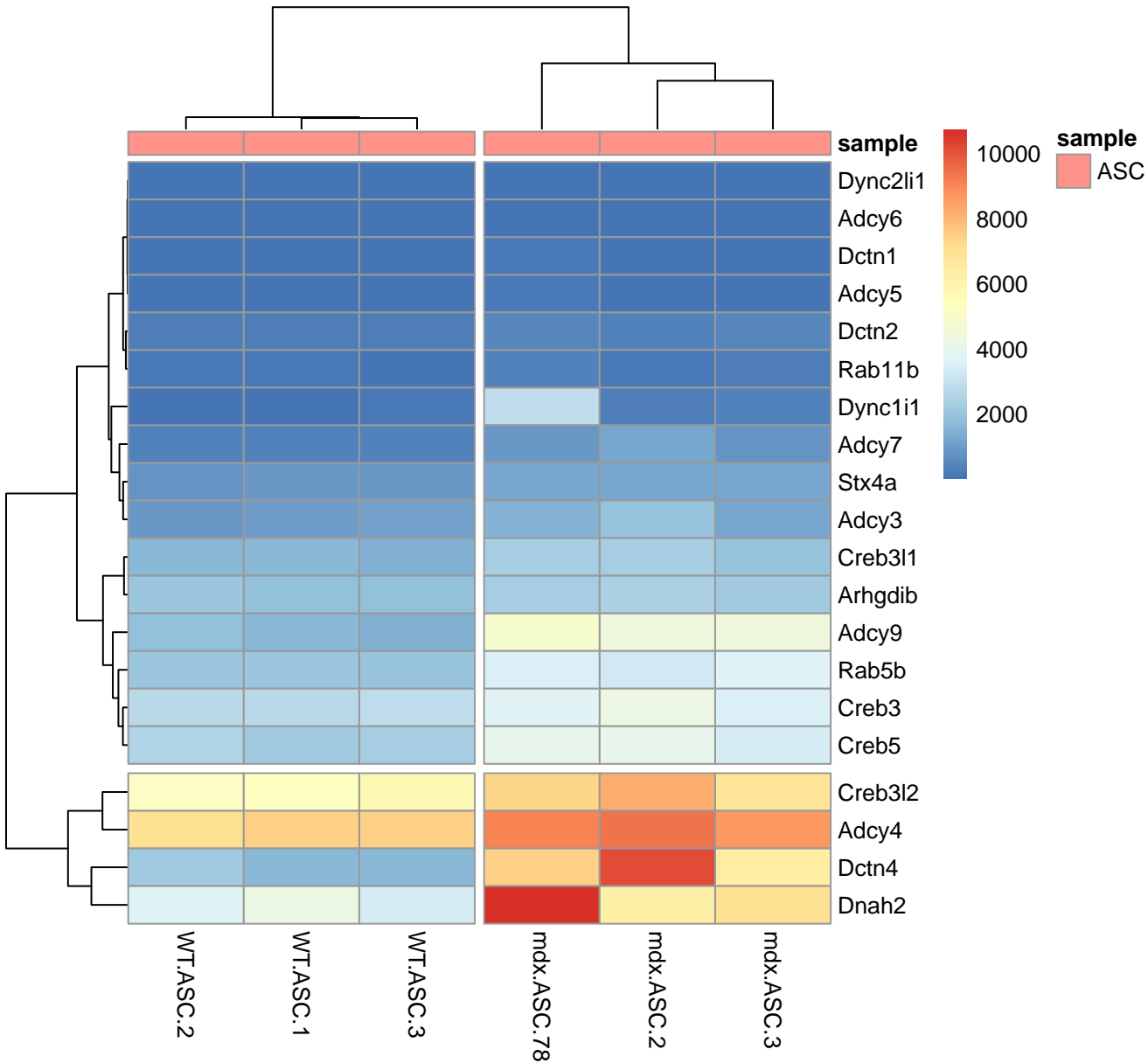# KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION

Expressed Matrix for genes active in
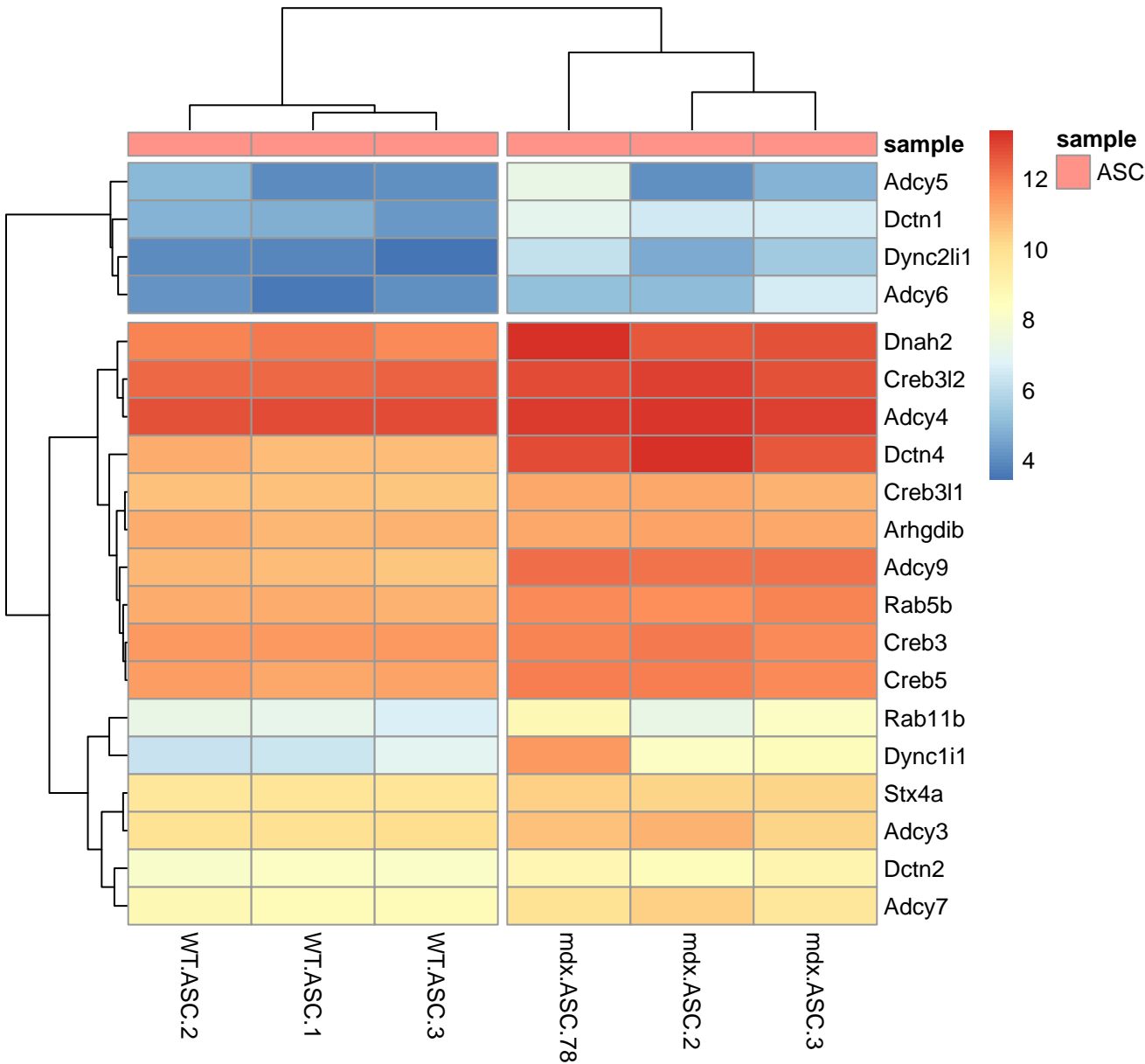## KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION

Scalling expressed matrix for genes active in
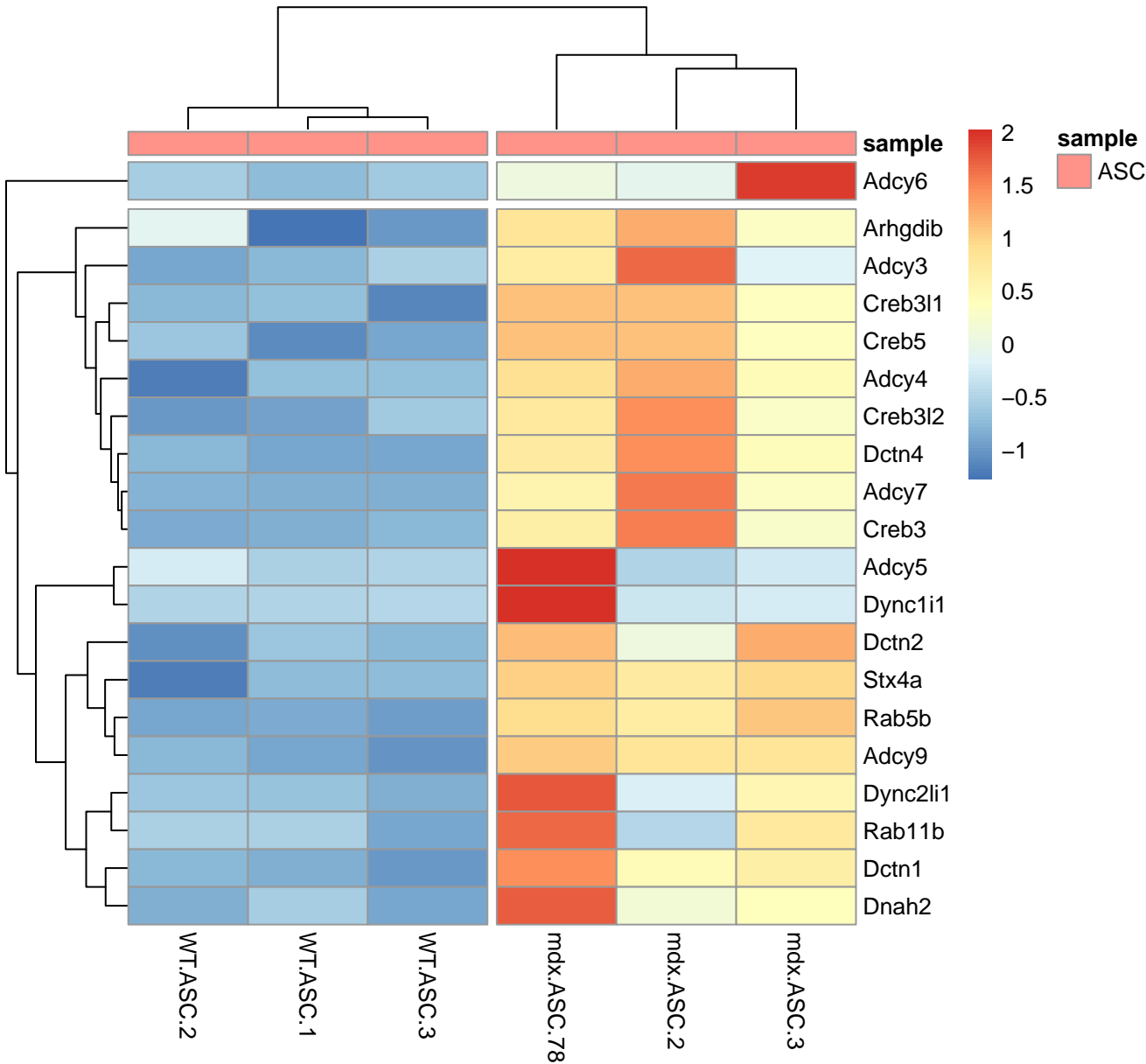**KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION**

Expressed Matrix from Normalized for genes in KEGG_VASOPRESSIN_REGULATED_WATER_REABSORPTION

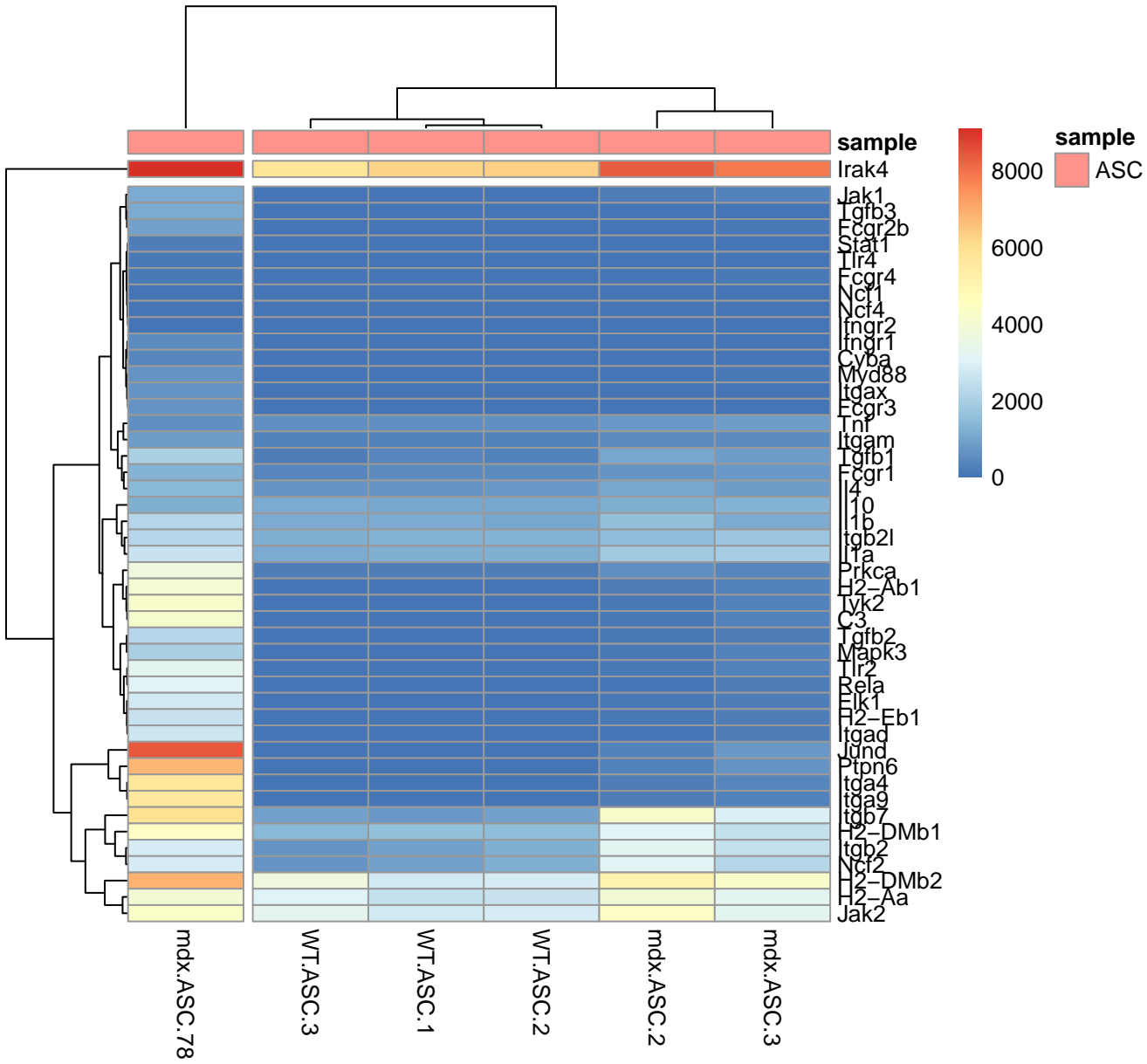# Expressed Matrix for genes active in
KEGG_VASOPRESSIN_REGULATED_WATER_REABSORPTION

Scalling expressed matrix for genes active in
KEGG_VASOPRESSIN_REGULATED_WATER_REABSORPTION

**Expressed Matrix from Normalized for genes in
KEGG_LEISHMANIA_INFECTION**

Expressed Matrix for genes active in
KEGG_LEISHMANIA_INFECTION

Scalling expressed matrix for genes active in KEGG_LEISHMANIA_INFECTION