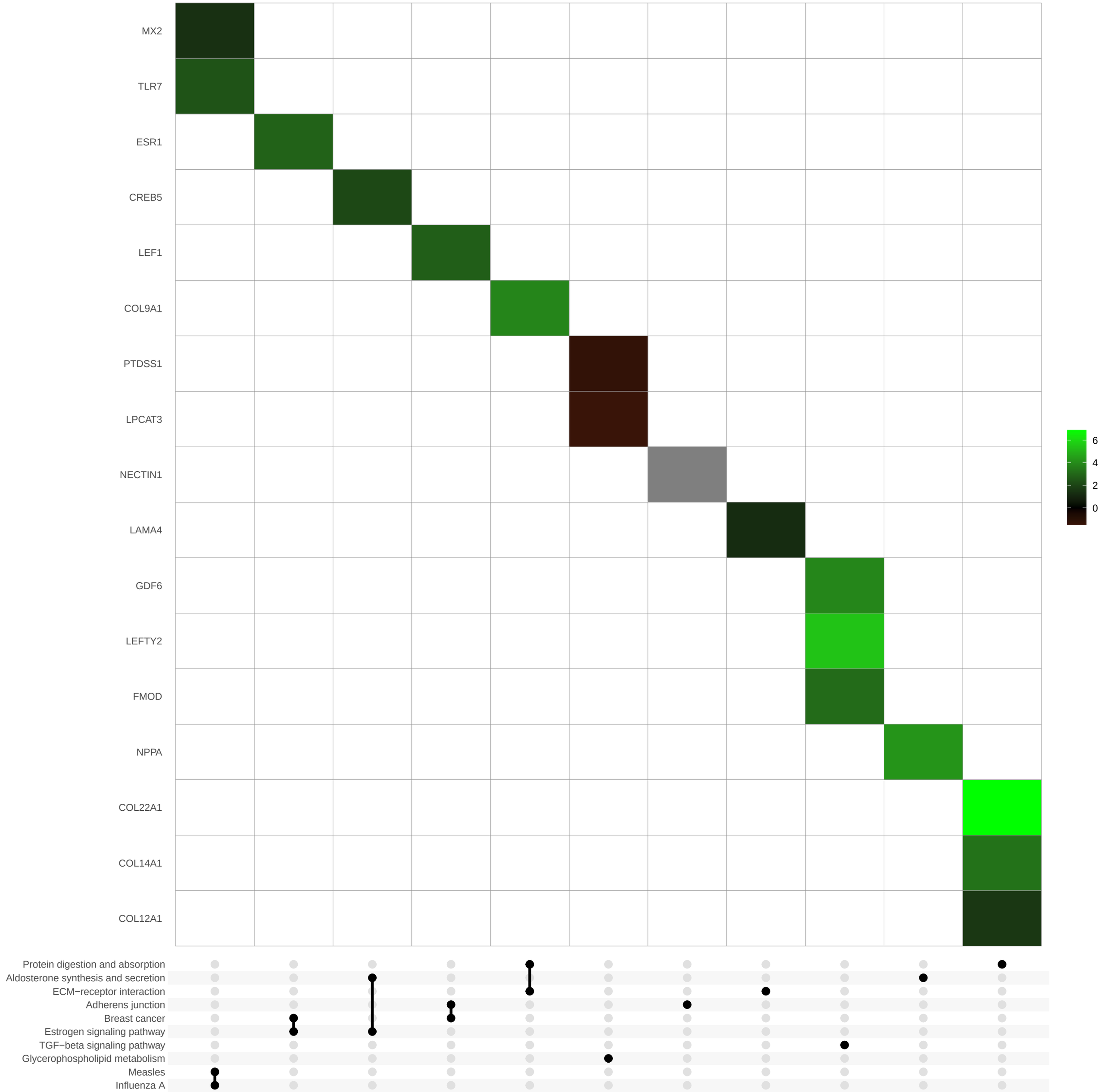
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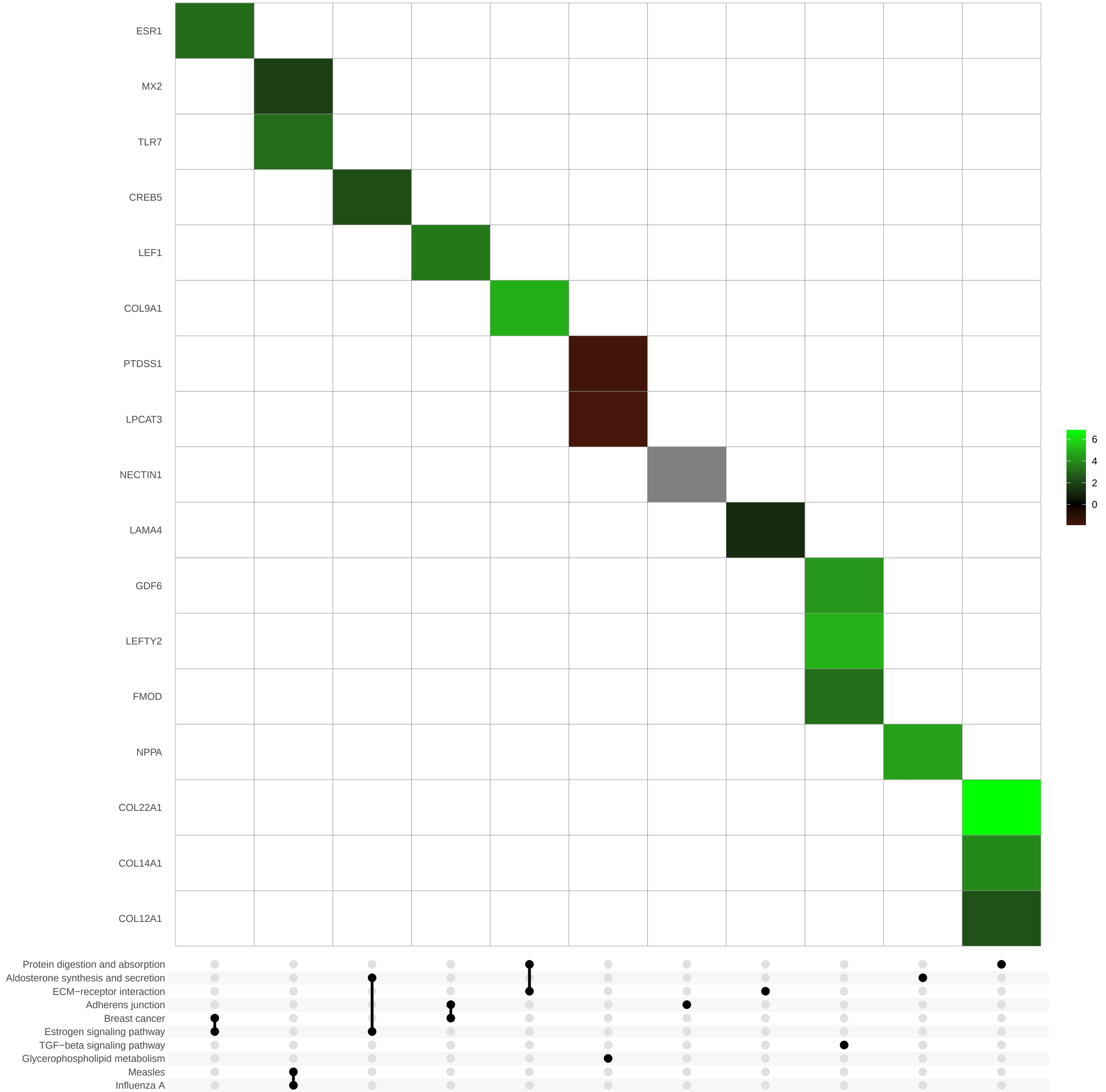
ESR1
CREB5
LEF1
COL9A1
PTDSS1
LPCAT3
NECTIN1
LAMA4
GDF6
LEFTY2
FMOD
NPPA
COL22A1
COL14A1
COL12A1
6
4
2
0
Protein digestion and absorption
Aldosterone synthesis and secretion
ECM−receptor interaction
Adherens junction
Breast cancer
Estrogen signaling pathway
TGF−beta signaling pathway
Glycerophospholipid metabolism
Measles
Influenza A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MX2
TLR7
CREB5
LEF1
COL9A1
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LPCAT3
NECTIN1
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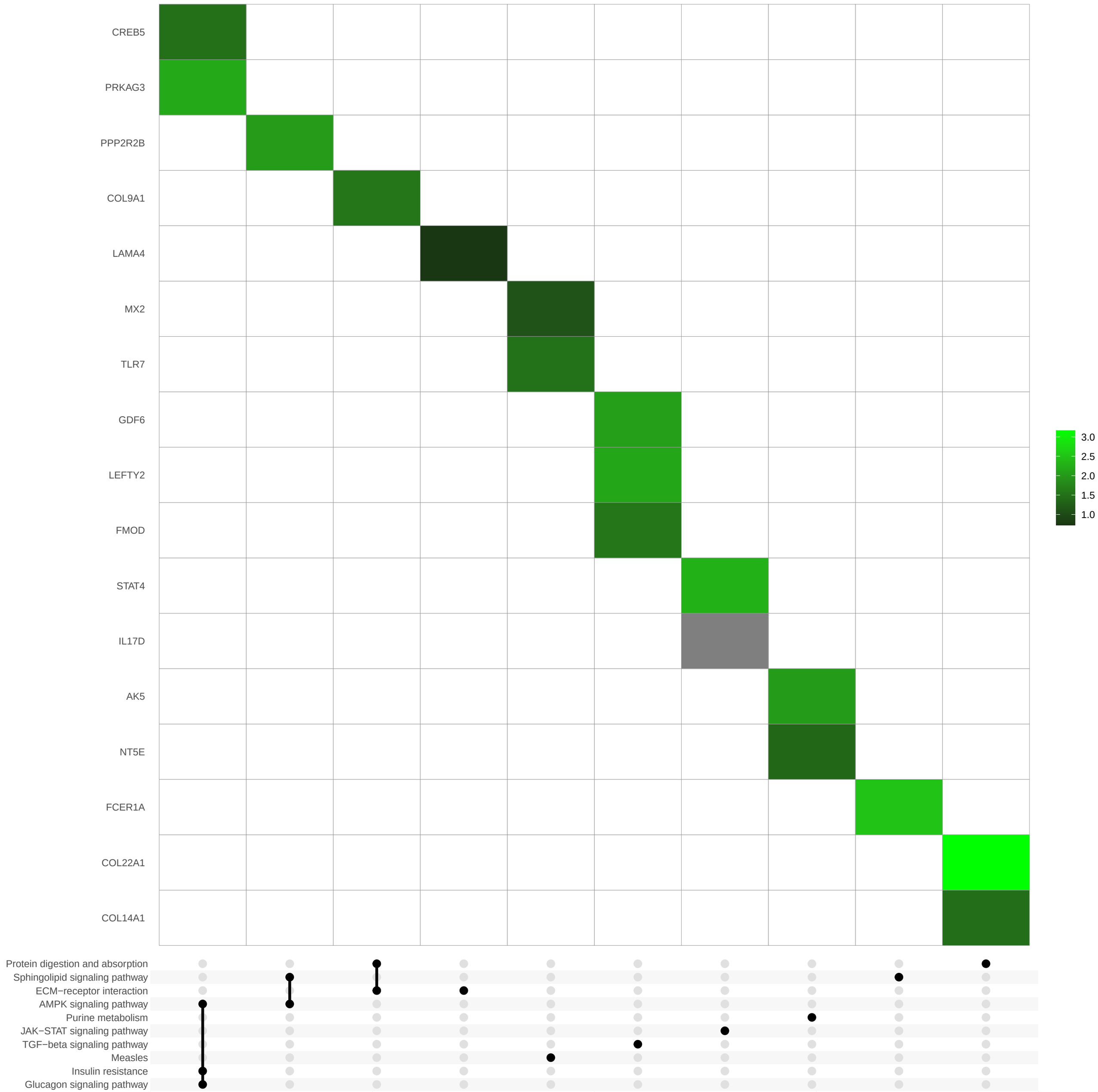
GDF6
LEFTY2
FMOD
NPPA
COL22A1
COL14A1
COL12A1
6
4
2
0
Protein digestion and absorption
Aldosterone synthesis and secretion
ECM−receptor interaction
Adherens junction
Breast cancer
Estrogen signaling pathway
TGF−beta signaling pathway
Glycerophospholipid metabolism
Measles
Influenza A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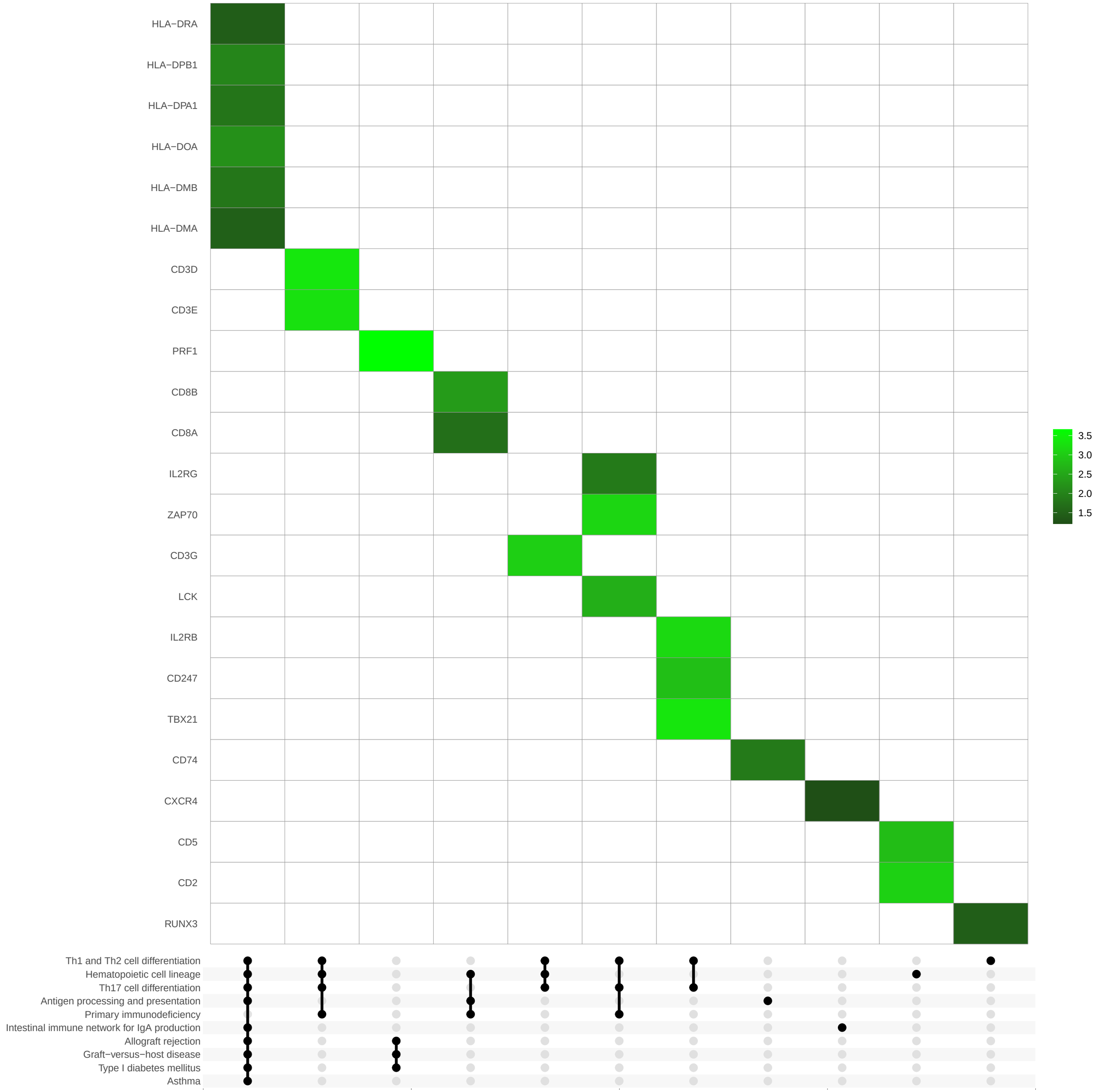
LAMA4
MX2
TLR7
GDF6
LEFTY2
FMOD
STAT4
IL17D
AK5
NT5E
FCER1A
COL22A1
COL14A1
3.0
2.5
2.0
1.5
1.0
Protein digestion and absorption
Sphingolipid signaling pathway
ECM−receptor interaction
AMPK signaling pathway
Purine metabolism
JAK−STAT signaling pathway
TGF−beta signaling pathway
Measles
Insulin resistance
Glucagon signaling pathway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HLA−DPA1
HLA−DOA
HLA−DMB
HLA−DMA
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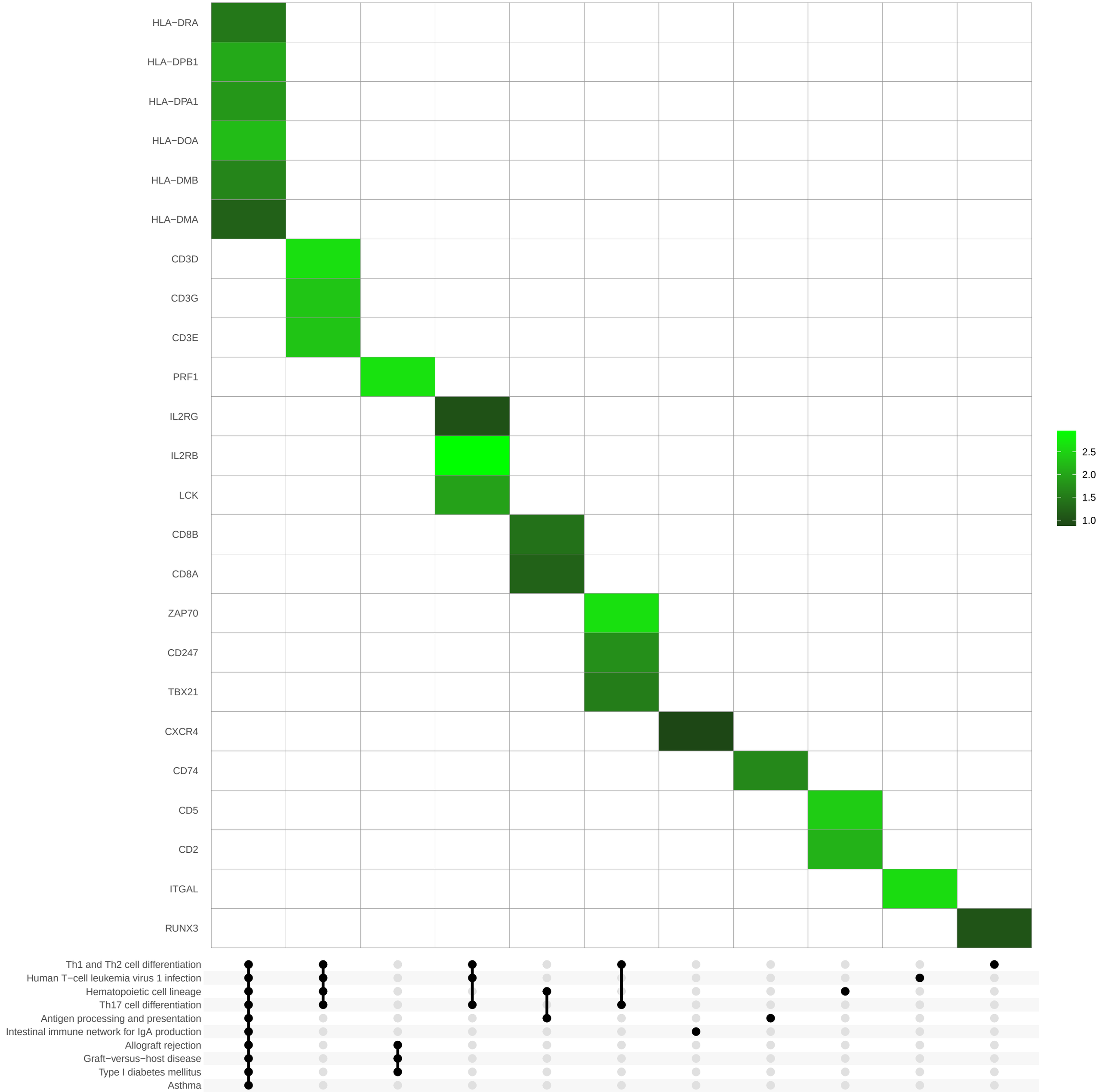
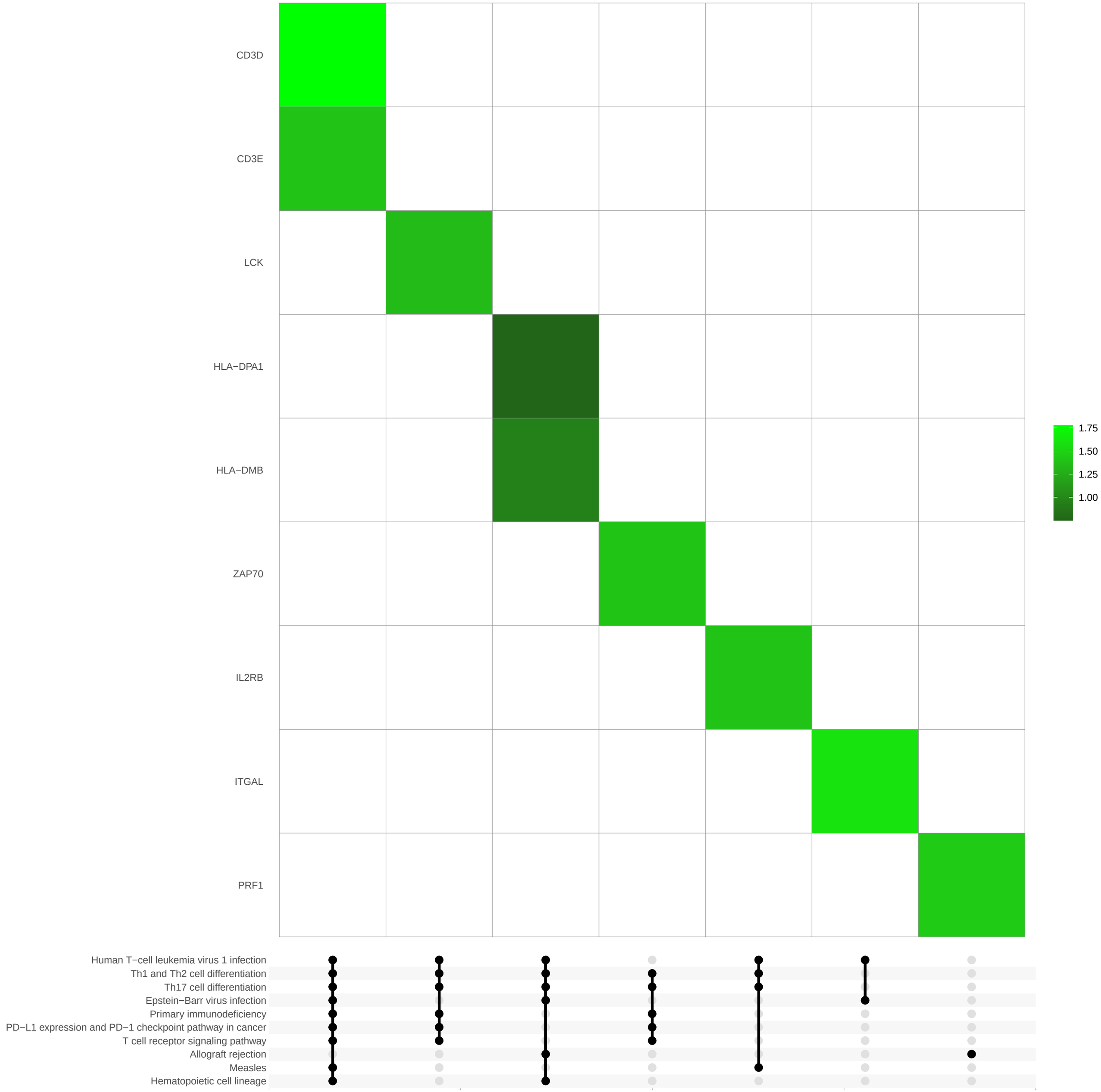
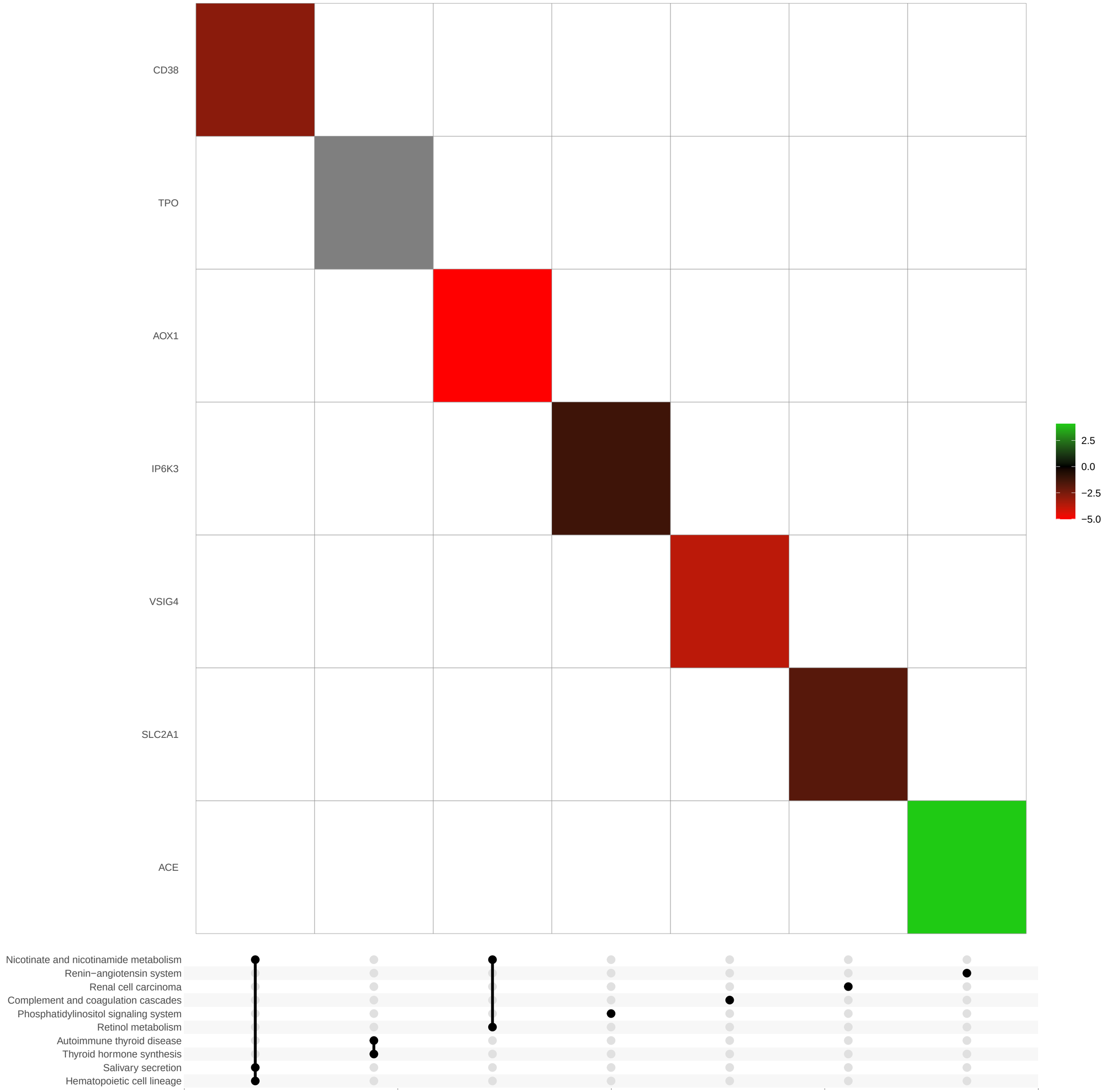
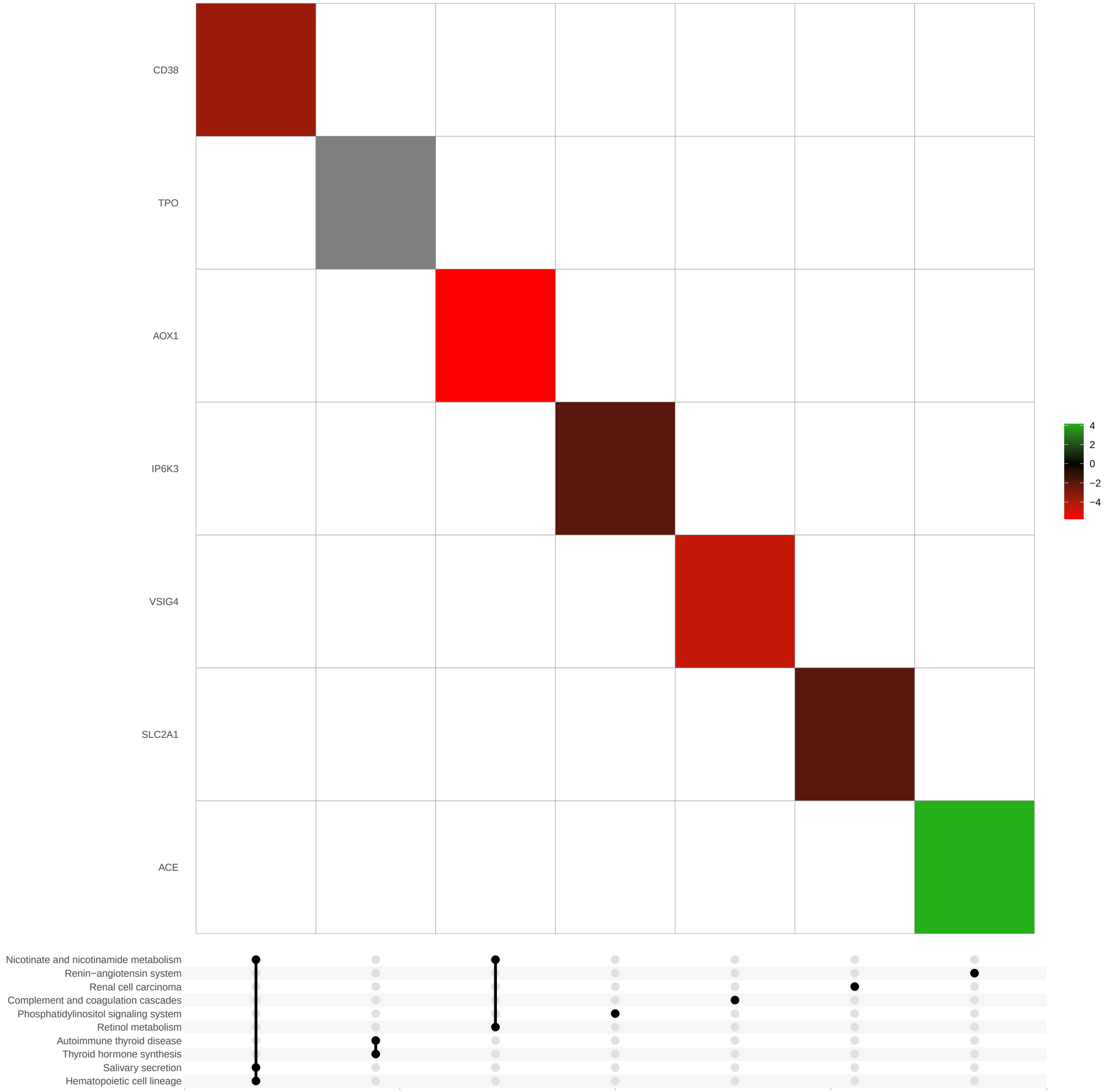
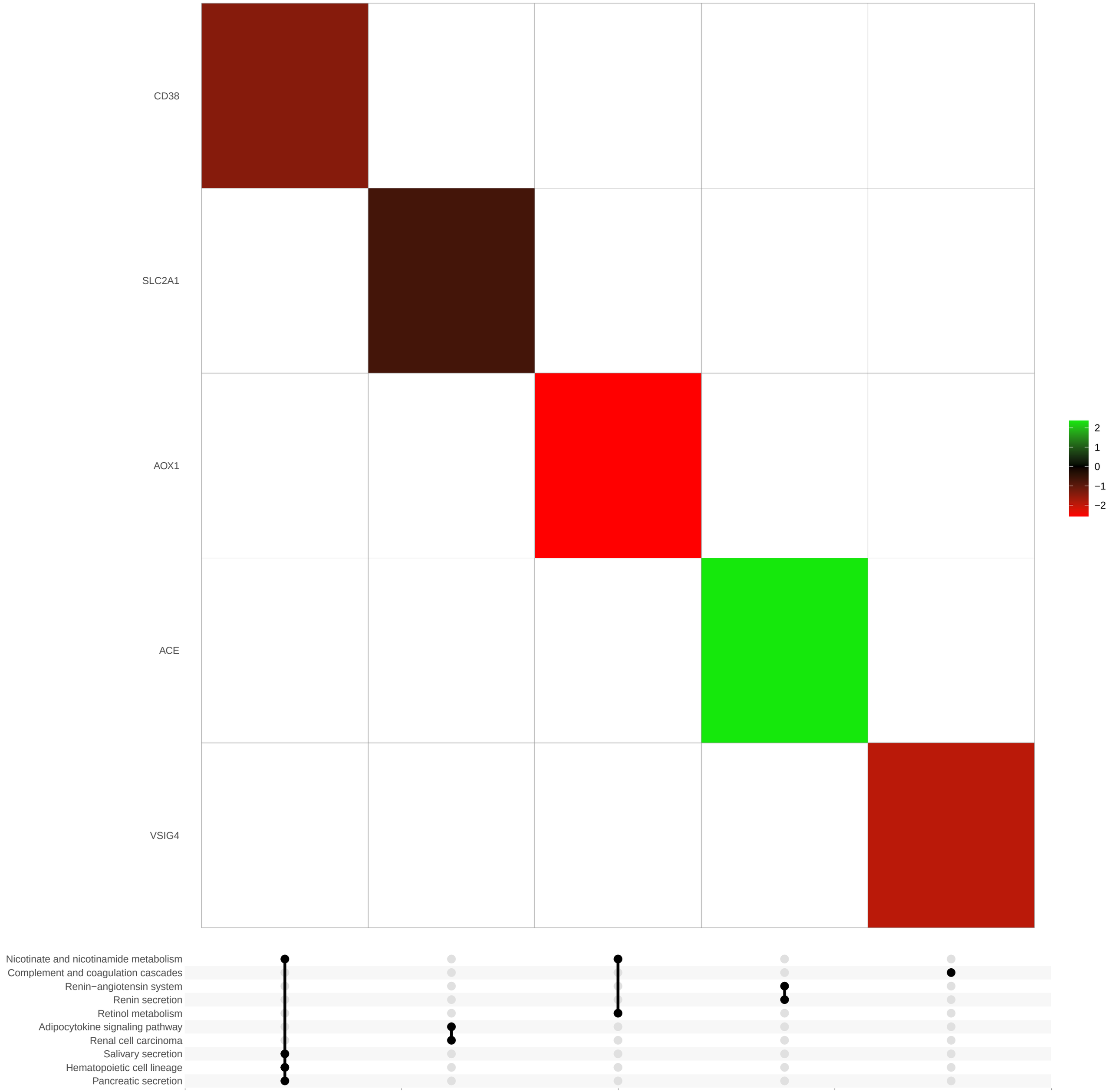
CD3E
PRF1
CD8B
CD8A
IL2RG
ZAP70
CD3G
LCK
IL2RB
CD247
TBX21
CD74
CXCR4
CD5
CD2
RUNX3
3.5
3.0
2.5
2.0
1.5
Th1 and Th2 cell differentiation
Hematopoietic cell lineage
Th17 cell differentiation
Antigen processing and presentation
Primary immunodeficiency
Intestinal immune network for IgA production
Allograft rejection
Graft−versus−host disease
Type I diabetes mellitus
Asthma


HLA−DRA
HLA−DPB1
HLA−DPA1
HLA−DOA
HLA−DMB
HLA−DMA
CD3D
CD3G
CD3E
PRF1
IL2RG
IL2RB
LCK
CD8B
CD8A
ZAP70
CD247
TBX21
CXCR4
CD74
CD5
CD2
ITGAL
RUNX3
2.5
2.0
1.5
1.0
Th1 and Th2 cell differentiation
Human T−cell leukemia virus 1 infection
Hematopoietic cell lineage
Th17 cell differentiation
Antigen processing and presentation
Intestinal immune network for IgA production
Allograft rejection
Graft−versus−host disease
Type I diabetes mellitus
Asthma


CD3D
CD3E
LCK
HLA−DPA1
HLA−DMB
ZAP70
IL2RB
ITGAL
PRF1
1.75
1.50
1.25
1.00
Human T−cell leukemia virus 1 infection
Th1 and Th2 cell differentiation
Th17 cell differentiation
Epstein−Barr virus infection
Primary immunodeficiency
PD−L1 expression and PD−1 checkpoint pathway in cancer
T cell receptor signaling pathway
Allograft rejection
Measles
Hematopoietic cell lineage


CD38
TPO
AOX1
IP6K3
VSIG4
SLC2A1
ACE
2.5
0.0
−2.5
−5.0
Nicotinate and nicotinamide metabolism
Renin−angiotensin system
Renal cell carcinoma
Complement and coagulation cascades
Phosphatidylinositol signaling system
Retinol metabolism
Autoimmune thyroid disease
Thyroid hormone synthesis
Salivary secretion
Hematopoietic cell lineage


CD38
TPO
AOX1
IP6K3
VSIG4
SLC2A1
ACE
4
2
0
−2
−4
Nicotinate and nicotinamide metabolism
Renin−angiotensin system
Renal cell carcinoma
Complement and coagulation cascades
Phosphatidylinositol signaling system
Retinol metabolism
Autoimmune thyroid disease
Thyroid hormone synthesis
Salivary secretion
Hematopoietic cell lineage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SLC2A1
AOX1
ACE
VSIG4
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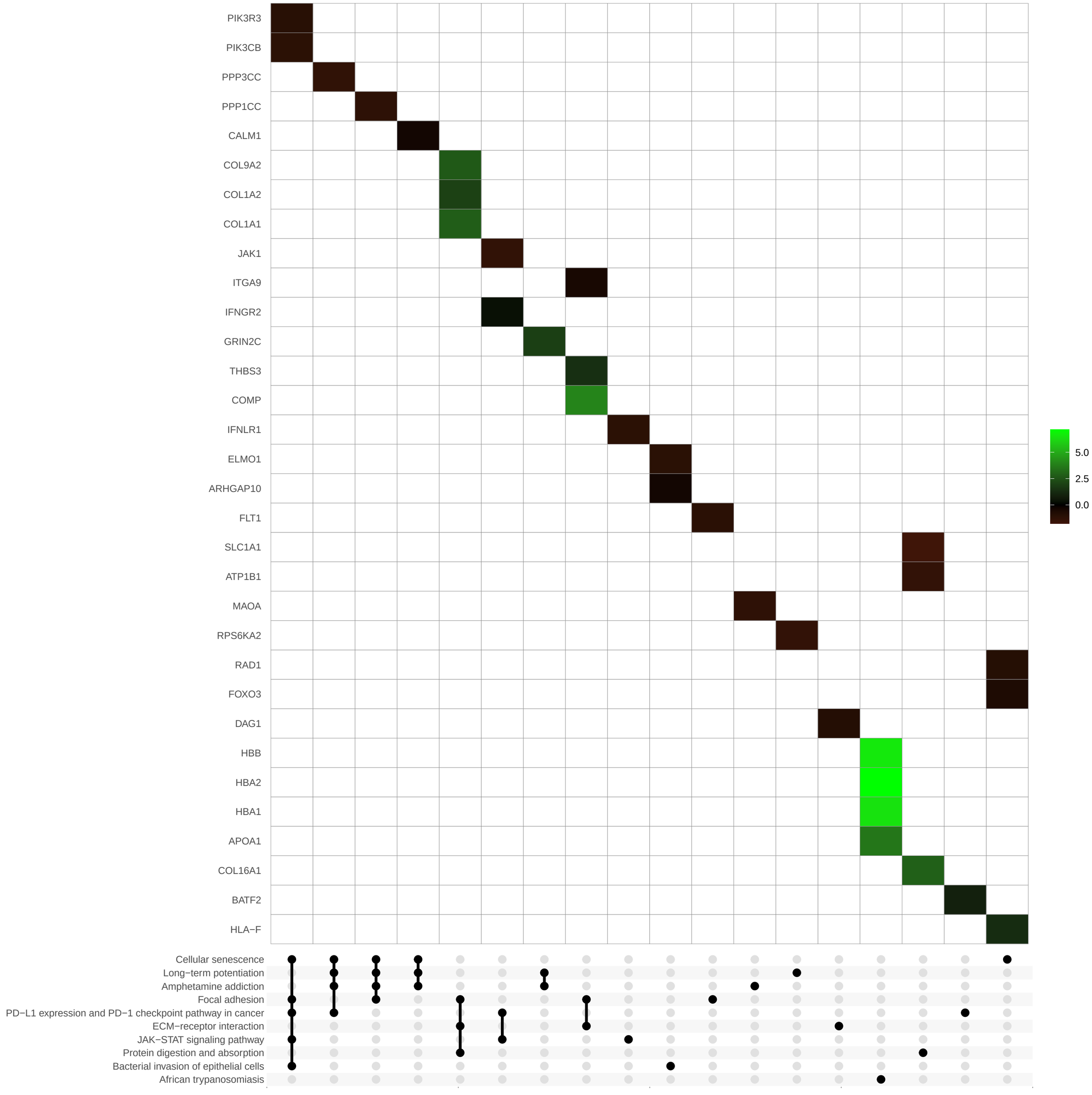
−1
−2
Nicotinate and nicotinamide metabolism
Complement and coagulation cascades
Renin−angiotensin system
Renin secretion
Retinol metabolism
Adipocytokine signaling pathway
Renal cell carcinoma
Salivary secretion
Hematopoietic cell lineage
Pancreatic secretion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PIK3CB
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PPP1CC
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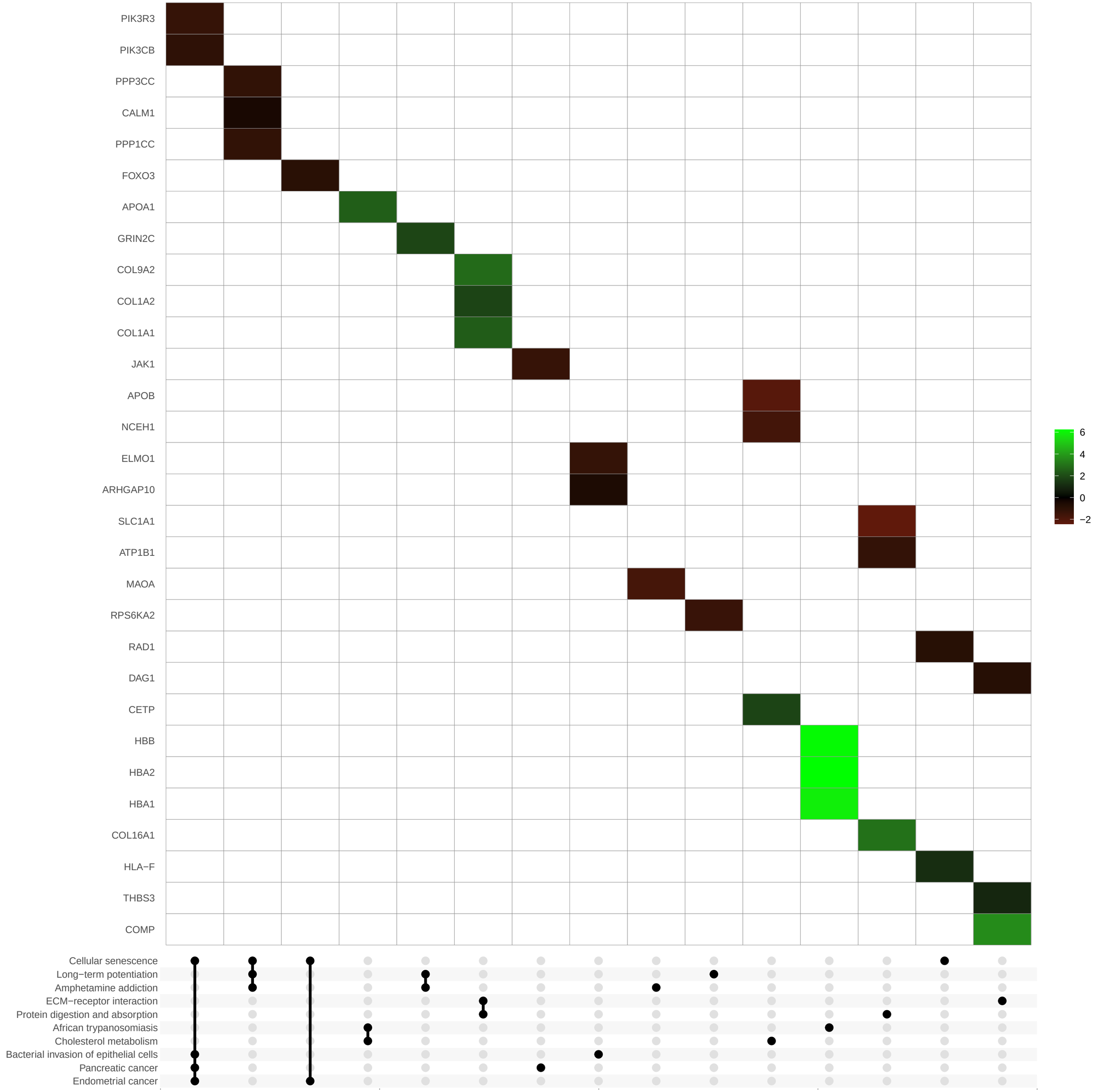
COL9A2
COL1A2
COL1A1
JAK1
ITGA9
IFNGR2
GRIN2C
THBS3
COMP
IFNLR1
ELMO1
ARHGAP10
FLT1
SLC1A1
ATP1B1
MAOA
RPS6KA2
RAD1
FOXO3
DAG1
HBB
HBA2
HBA1
APOA1
COL16A1
BATF2
HLA−F
5.0
2.5
0.0
Cellular senescence
Long−term potentiation
Amphetamine addiction
Focal adhesion
PD−L1 expression and PD−1 checkpoint pathway in cancer
ECM−receptor interaction
JAK−STAT signaling pathway
Protein digestion and absorption
Bacterial invasion of epithelial cells
African trypanosomiasis


PIK3R3
PIK3CB
PPP3CC
CALM1
PPP1CC
FOXO3
APOA1
GRIN2C
COL9A2
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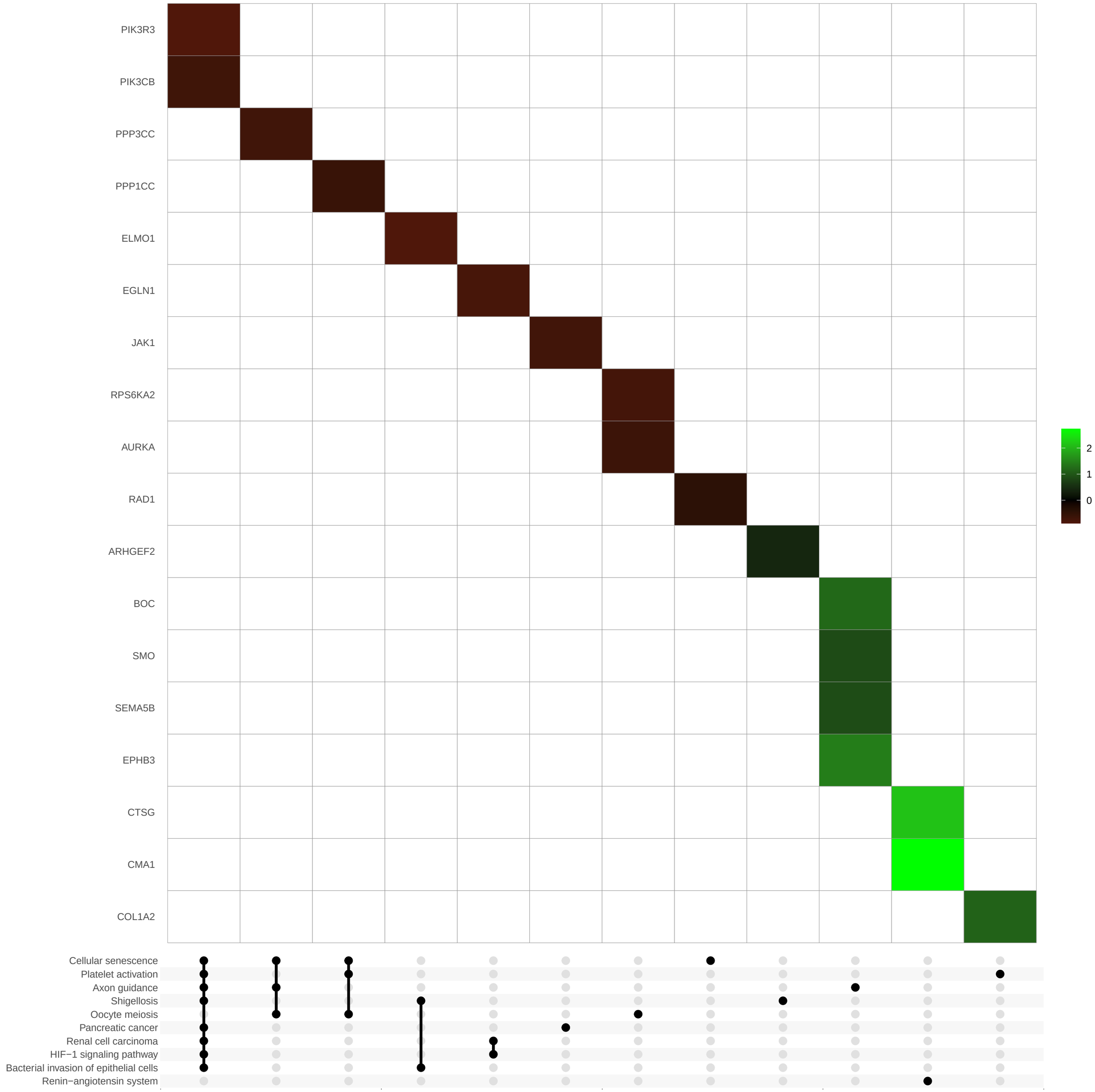
COL1A1
JAK1
APOB
NCEH1
ELMO1
ARHGAP10
SLC1A1
ATP1B1
MAOA
RPS6KA2
RAD1
DAG1
CETP
HBB
HBA2
HBA1
COL16A1
HLA−F
THBS3
COMP
6
4
2
0
−2
Cellular senescence
Long−term potentiation
Amphetamine addiction
ECM−receptor interaction
Protein digestion and absorption
African trypanosomiasis
Cholesterol metabolism
Bacterial invasion of epithelial cells
Pancreatic cancer
Endometrial cancer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PIK3CB
PPP3CC
PPP1CC
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EGLN1
JAK1
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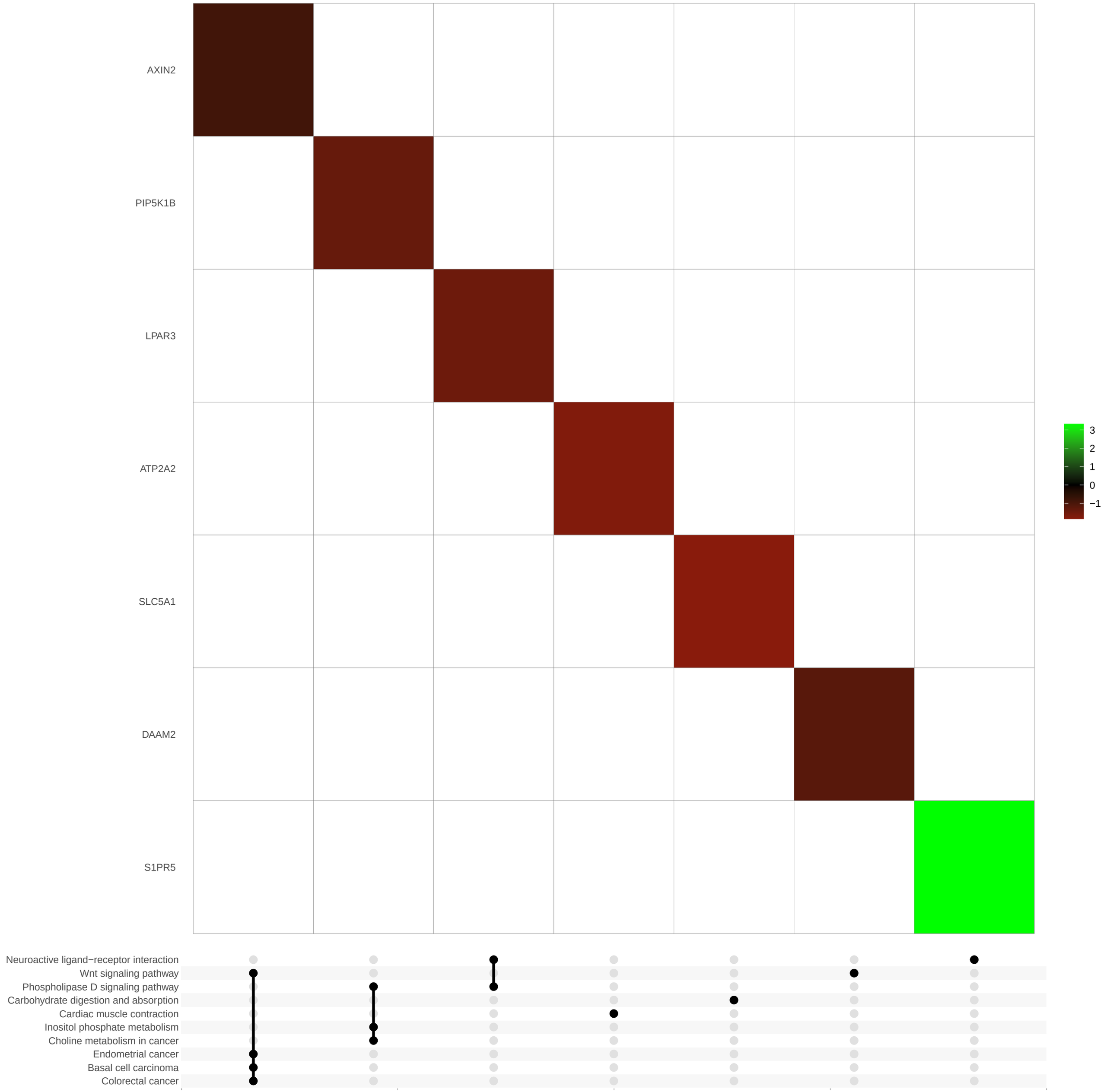
AURKA
RAD1
ARHGEF2
BOC
SMO
SEMA5B
EPHB3
CTSG
CMA1
COL1A2
2
1
0
Cellular senescence
Platelet activation
Axon guidance
Shigellosis
Oocyte meiosis
Pancreatic cancer
Renal cell carcinoma
HIF−1 signaling pathway
Bacterial invasion of epithelial cells
Renin−angiotensin system


AXIN2
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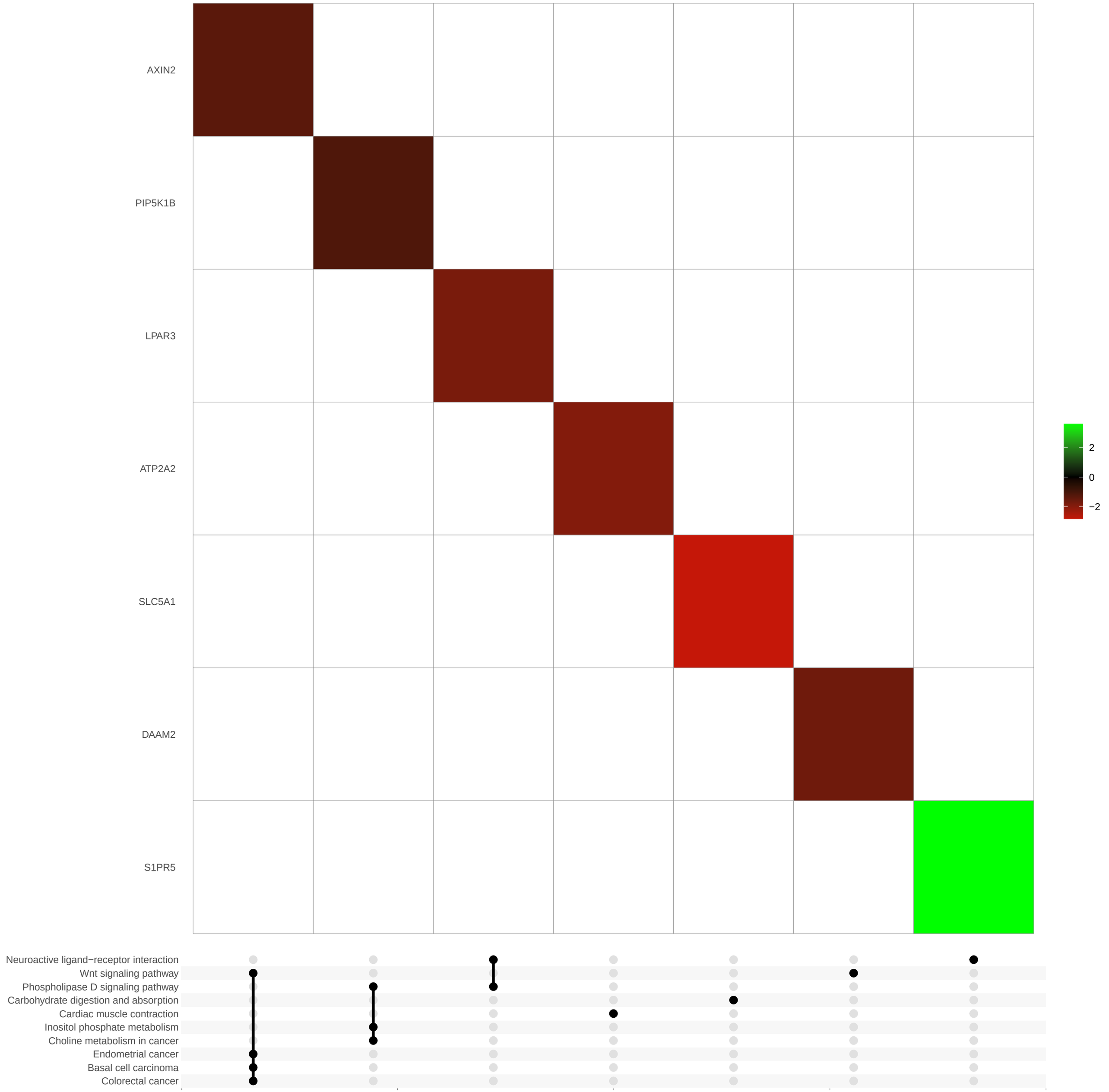
LPAR3
ATP2A2
SLC5A1
DAAM2
S1PR5
3
2
1
0
−1
Neuroactive ligand−receptor interaction
Wnt signaling pathway
Phospholipase D signaling pathway
Carbohydrate digestion and absorption
Cardiac muscle contraction
Inositol phosphate metabolism
Choline metabolism in cancer
Endometrial cancer
Basal cell carcinoma
Colorectal cancer


AXIN2
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LPAR3
ATP2A2
SLC5A1
DAAM2
S1PR5
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Neuroactive ligand−receptor interaction
Wnt signaling pathway
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Carbohydrate digestion and absorption
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Inositol phosphate metabolism
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Endometrial cancer
Basal cell carcinoma
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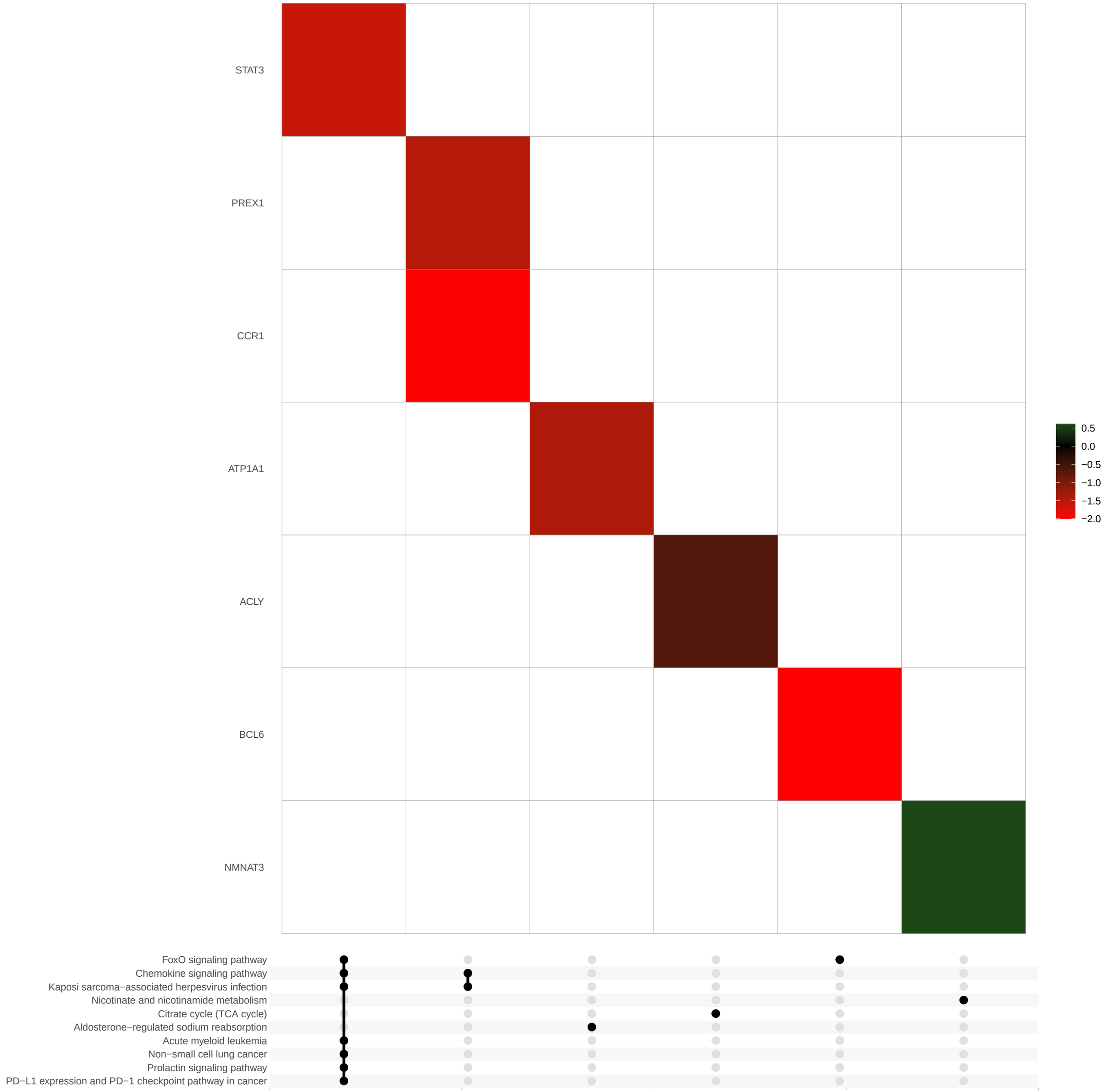
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CCR1
ATP1A1
ACLY
BCL6
NMNAT3
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−1.5
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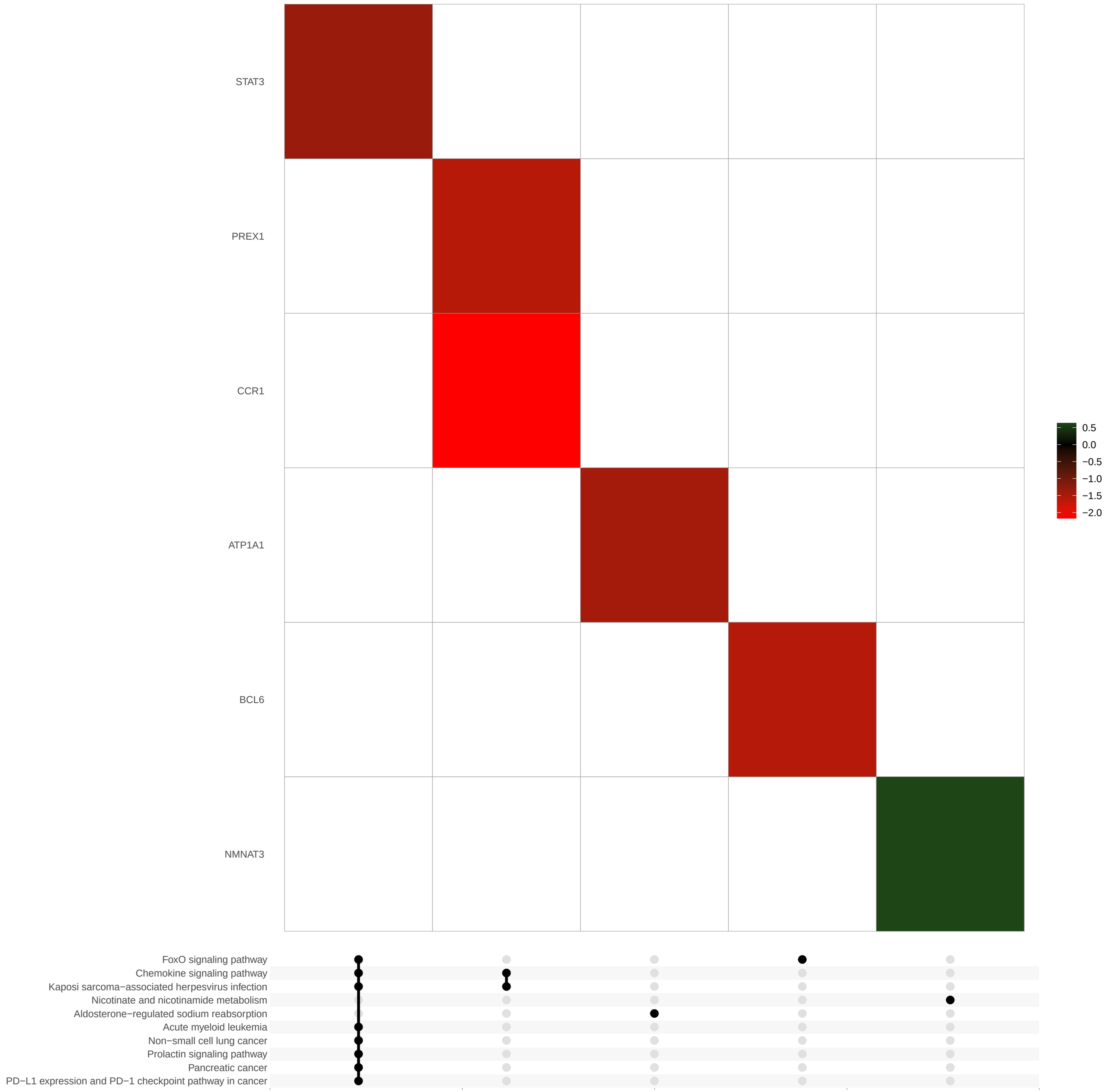
FoxO signaling pathway
Chemokine signaling pathway
Kaposi sarcoma−associated herpesvirus infection
Nicotinate and nicotinamide metabolism
Citrate cycle (TCA cycle)
Aldosterone−regulated sodium reabsorption
Acute myeloid leukemia
Non−small cell lung cancer
Prolactin signaling pathway
PD−L1 expression and PD−1 checkpoint pathway in cancer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CCR1
ATP1A1
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FoxO signaling pathway
Chemokine signaling pathway
Kaposi sarcoma−associated herpesvirus infection
Nicotinate and nicotinamide metabolism
Aldosterone−regulated sodium reabsorption
Acute myeloid leukemia
Non−small cell lung cancer
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