Demo: A heatmap summarizes the top 50 expressed genes in GTEx liver samples.
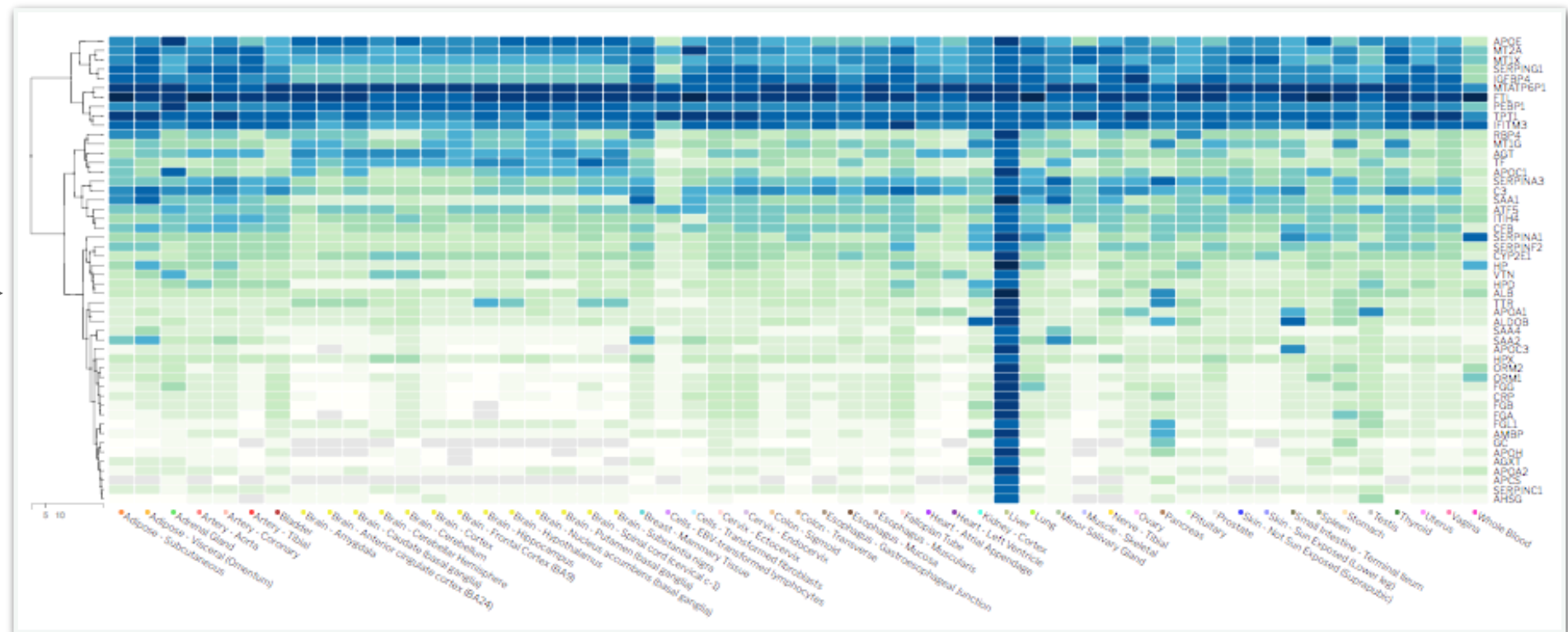

Rows: the 50 most highly expressed genes in liver, excluding mitochondrial genes.

Columns: the 53 GTEx tissues color-coded based on the tissue types.

Genes and tissues are hierarchically clustered by default.
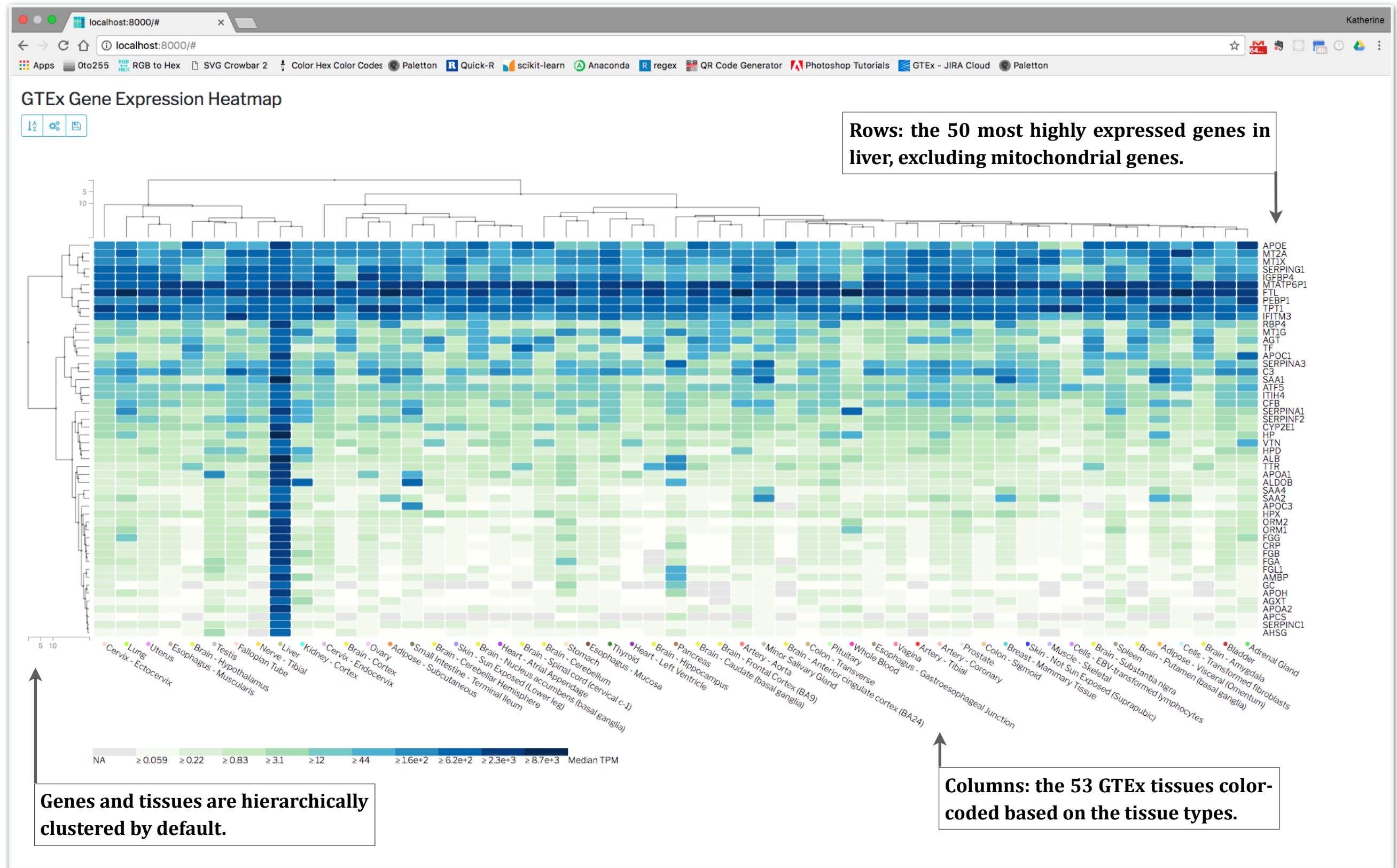
Optional view: Tissues can also be arranged alphabetically.

Tissues are clustered.

Tissues are sorted alphabetically.

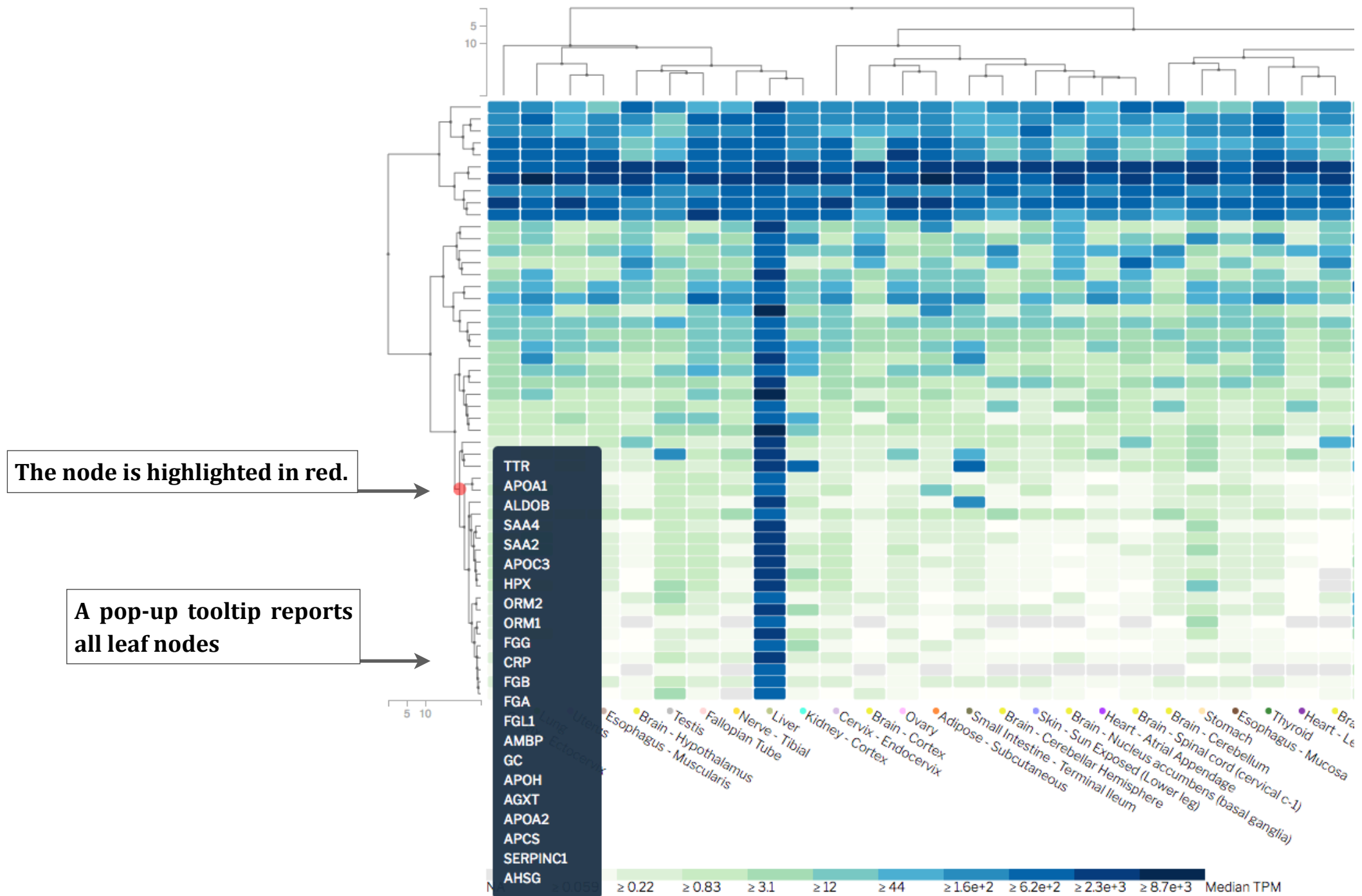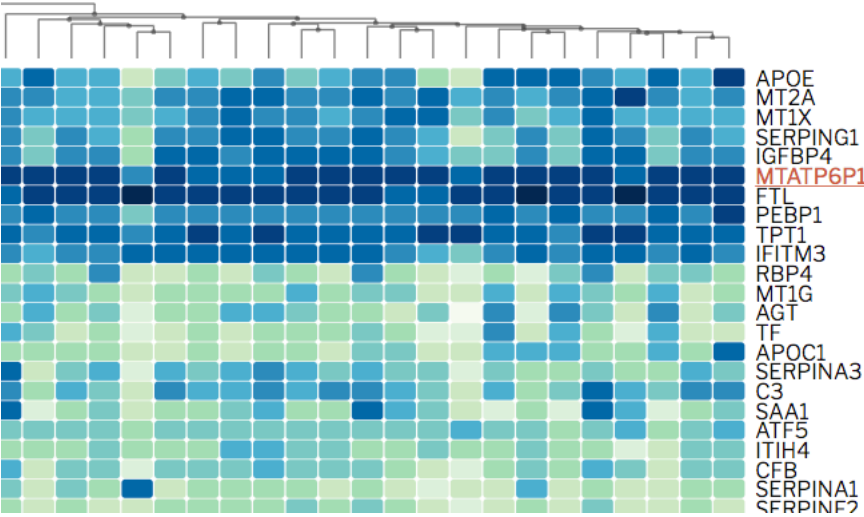There are many interactive features.

Mouseover of heatmap cells

A pop-up tooltip reports the tissue, gene name, and median TPM value.

The cell is bordered in red.

The row label is underlined.

Tissue: Brain - Substantia nigra
Gene: VTN
Median TPM: 1.706

SAA1
ATF5
ITIH4
CFB
SERPINA1
SERPINF2
CYP2E1
HP
VTN
HPD
ALB
TTR
APOA1
ALDOB
SAA4
SAA2
APOC3
HPX
ORM2
ORM1
FGG
CRP
FGB
FGA
FGL1
AMBP
GC
APOH
AGXT
APOA2
APCS
SERPINC1
AHSG

The column label is underlined.

Skin - Not Sun Exposed (Suprapubic)
...oid
...st - Mammary Tissue
Muscle - Skeletal
Cells - EBV-transformed lymphocytes
Brain - Substantia nigra
Spleen
Brain - Putamen (basal ganglia)
Adipose - Visceral (Omentum)
Cells - Transformed fibroblasts
Brain - Amygdala
Bladder
Adrenal Gland

Mouseover of internal dendrogram nodes

The node is highlighted in red.

A pop-up tooltip reports all leaf nodes

Tooltip gene list:
TTR
APOA1
ALDOB
SAA4
SAA2
APOC3
HPX
ORM2
ORM1
FGG
CRP
FGB
FGA
FGL1
AMBP
GC
APOH
AGXT
APOA2
APCS
SERPINC1
AHSG

Legend: ≥ 0.055 ≥ 0.22 ≥ 0.83 ≥ 3.1 ≥ 12 ≥ 44 ≥ 1.6e+2 ≥ 6.2e+2 ≥ 2.3e+3 ≥ 8.7e+3 Median TPM
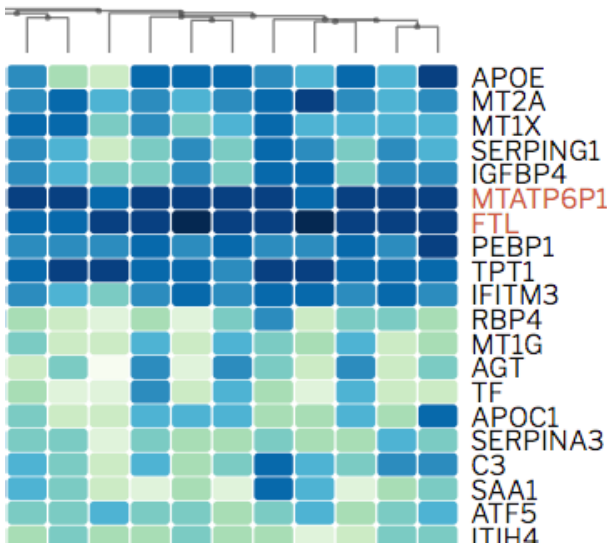
Click of gene labels

The gene is highlighted in red.

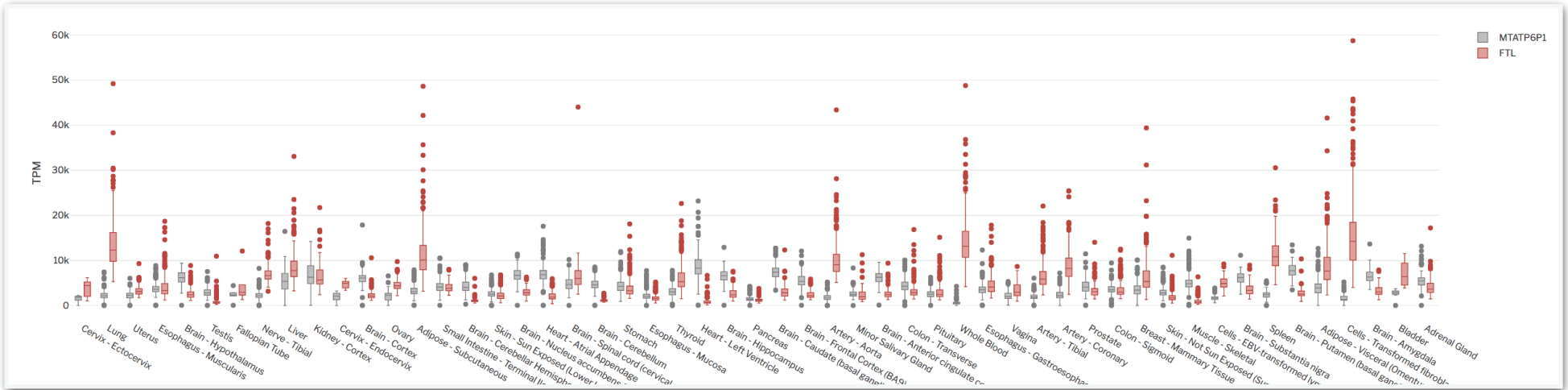A detailed expression boxplot of the gene appears below the heatmap.
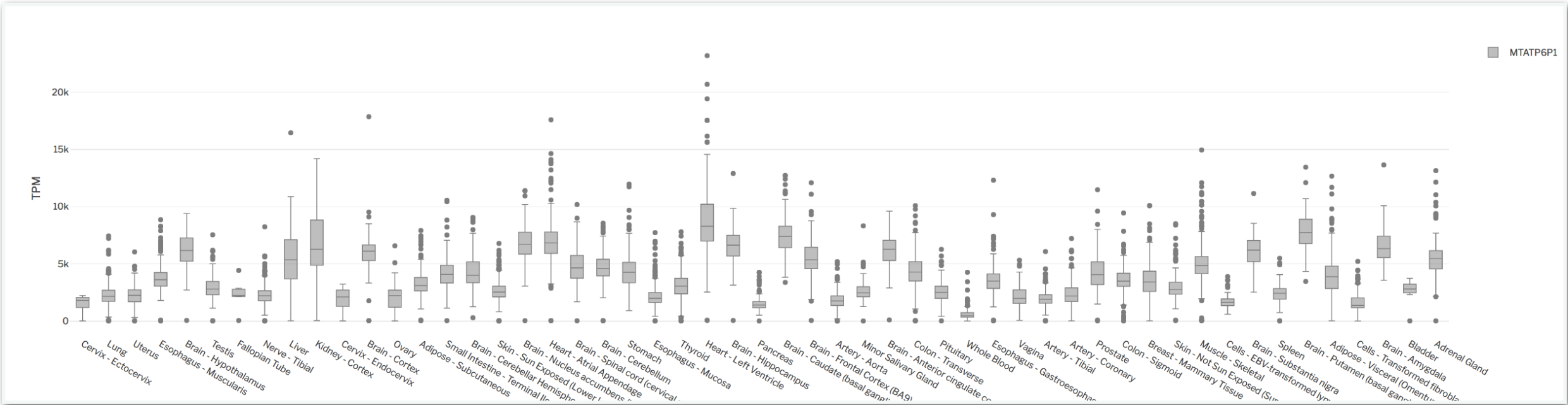
Alt-click of gene labels

The gene is added and highlighted in red.

The expression boxplot shows both selected genes.

The boxplot has zoom options.