

# Alignment AA

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## 1 Gene Expression

### 1.1 Dependencies

```
library(ggplot2)
library(readr)
library(devtools)
library(rmarkdown)
```

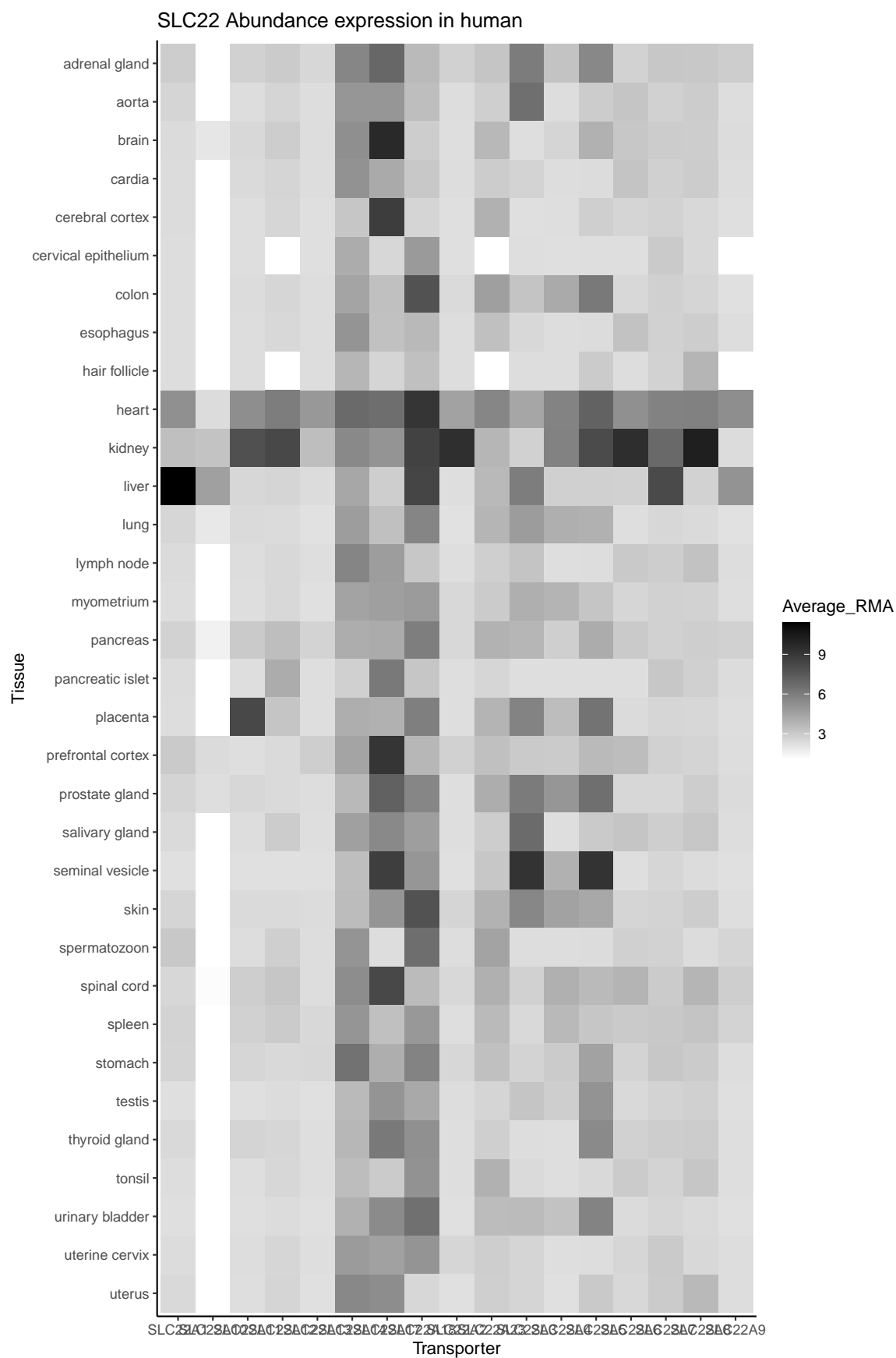
### 1.2 Import data

```
Transporters <- read_csv("data/ExpressionRMA.csv")
paged_table(Transporters)
```

## 2 Create plot

```
gtrans <- ggplot(Transporters, aes(Transporter, Tissue, fill= Average_RMA)) +
  geom_tile() +
  scale_fill_gradient(low="white", high="black") +
  theme(strip.placement = "outside",
        plot.title = element_text(hjust = 0.5)) +
```

```
ggtitle(label = "SLC22 Abundance expression in human") +  
scale_y_discrete(limits = rev(levels(as.factor(Transporters$Tissue)))) +  
scale_x_discrete(limits = levels(as.factor(Transporters$Transporter))) +  
theme_classic()  
#print  
print(gtrans)
```

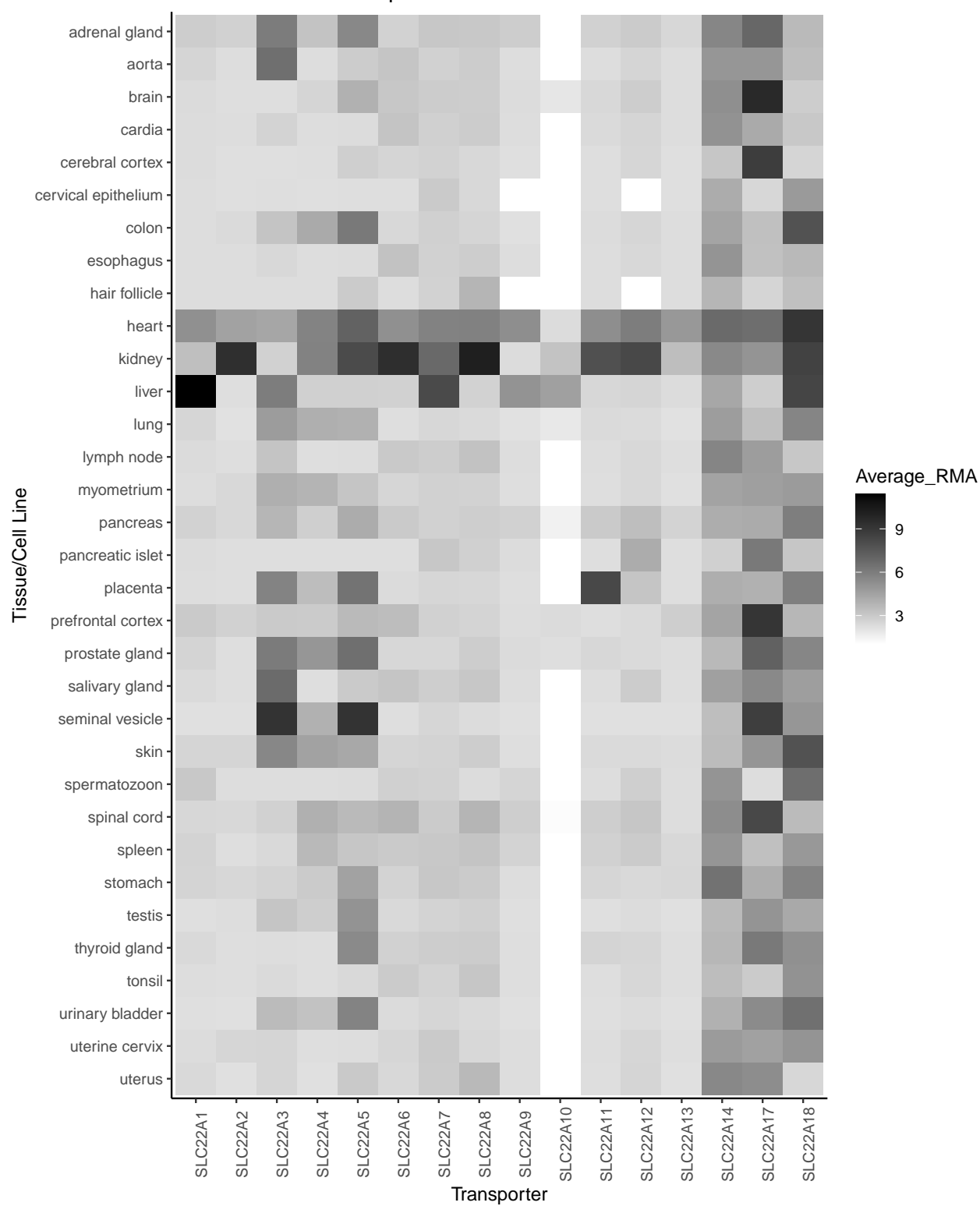


### 3 Improve plot

```
#display axis names and rotate x label to a 90 angle
gtrans + labs(x = "Transporter", y = "Tissue/Cell Line") +
  scale_x_discrete(limits = c("SLC22A1", "SLC22A2", "SLC22A3", "SLC22A4", "SLC22A5", "SLC22A6", "SLC22A7")) +
  theme(axis.text.x = element_text(angle=90))
```

```
## Warning: Removed 31 rows containing missing values (geom_tile).
```

SLC22 Abundance expression in human



## 4 Session info

```
session_info()
```

```
- Session info -----
setting  value
version  R version 4.0.5 (2021-03-31)
os       macOS Big Sur 10.16
system   x86_64, darwin17.0
ui       X11
language (EN)
collate  en_GB.UTF-8
ctype    en_GB.UTF-8
tz       Europe/London
date     2022-04-02
pandoc   2.11.4 @ /Applications/RStudio.app/Contents/MacOS/pandoc/ (via rmarkdown)

- Packages -----
! package      * version date (UTC) lib source
 assertthat    0.2.1   2019-03-21 [2] CRAN (R 4.0.2)
  bit          4.0.4   2020-08-04 [2] CRAN (R 4.0.2)
  bit64        4.0.5   2020-08-30 [2] CRAN (R 4.0.2)
  brio         1.1.3   2021-11-30 [2] CRAN (R 4.0.2)
  cachem       1.0.6   2021-08-19 [2] CRAN (R 4.0.2)
  callr        3.7.0   2021-04-20 [2] CRAN (R 4.0.2)
  cli          3.2.0   2022-02-14 [2] CRAN (R 4.0.5)
  colorspace   2.0-3   2022-02-21 [2] CRAN (R 4.0.5)
  crayon       1.5.1   2022-03-26 [2] CRAN (R 4.0.5)
  DBI          1.1.2   2021-12-20 [2] CRAN (R 4.0.2)
  desc        1.4.1   2022-03-06 [2] CRAN (R 4.0.5)
  devtools    * 2.4.3   2021-11-30 [2] CRAN (R 4.0.2)
  digest       0.6.29  2021-12-01 [2] CRAN (R 4.0.2)
  dplyr        1.0.8   2022-02-08 [2] CRAN (R 4.0.5)
  ellipsis     0.3.2   2021-04-29 [2] CRAN (R 4.0.2)
  evaluate     0.15    2022-02-18 [2] CRAN (R 4.0.5)
  fansi        1.0.3   2022-03-24 [2] CRAN (R 4.0.5)
  farver       2.1.0   2021-02-28 [2] CRAN (R 4.0.2)
  fastmap      1.1.0   2021-01-25 [2] CRAN (R 4.0.2)
  fs           1.5.2   2021-12-08 [2] CRAN (R 4.0.2)
  generics     0.1.2   2022-01-31 [2] CRAN (R 4.0.5)
P ggplot2     * 3.3.5   2021-06-25 [?] CRAN (R 4.0.2)
  glue         1.6.2   2022-02-24 [2] CRAN (R 4.0.5)
  gtable       0.3.0   2019-03-25 [2] CRAN (R 4.0.2)
  highr        0.9     2021-04-16 [2] CRAN (R 4.0.2)
  hms          1.1.1   2021-09-26 [2] CRAN (R 4.0.2)
  htmltools    0.5.2   2021-08-25 [2] CRAN (R 4.0.2)
  jsonlite     1.8.0   2022-02-22 [2] CRAN (R 4.0.5)
  knitr        1.38    2022-03-25 [2] CRAN (R 4.0.5)
  labeling     0.4.2   2020-10-20 [2] CRAN (R 4.0.2)
  lifecycle    1.0.1   2021-09-24 [2] CRAN (R 4.0.2)
  magrittr     2.0.3   2022-03-30 [2] CRAN (R 4.0.5)
  memoise      2.0.1   2021-11-26 [2] CRAN (R 4.0.2)
```

munsell	0.5.0	2018-06-12	[2]	CRAN (R 4.0.2)
pillar	1.7.0	2022-02-01	[2]	CRAN (R 4.0.5)
pkgbuild	1.3.1	2021-12-20	[2]	CRAN (R 4.0.2)
pkgconfig	2.0.3	2019-09-22	[2]	CRAN (R 4.0.2)
pkgload	1.2.4	2021-11-30	[2]	CRAN (R 4.0.2)
prettyunits	1.1.1	2020-01-24	[2]	CRAN (R 4.0.2)
processx	3.5.3	2022-03-25	[2]	CRAN (R 4.0.5)
ps	1.6.0	2021-02-28	[2]	CRAN (R 4.0.2)
purrr	0.3.4	2020-04-17	[2]	CRAN (R 4.0.2)
R6	2.5.1	2021-08-19	[2]	CRAN (R 4.0.2)
P readr	* 2.1.2	2022-01-30	[?]	CRAN (R 4.0.5)
remotes	2.4.2	2021-11-30	[2]	CRAN (R 4.0.2)
rlang	1.0.2	2022-03-04	[2]	CRAN (R 4.0.5)
rmarkdown	* 2.13	2022-03-10	[2]	CRAN (R 4.0.5)
rprojroot	2.0.2	2020-11-15	[2]	CRAN (R 4.0.2)
rstudioapi	0.13	2020-11-12	[2]	CRAN (R 4.0.2)
scales	1.1.1	2020-05-11	[2]	CRAN (R 4.0.2)
sessioninfo	1.2.2	2021-12-06	[2]	CRAN (R 4.0.2)
stringi	1.7.6	2021-11-29	[2]	CRAN (R 4.0.2)
P stringr	1.4.0	2019-02-10	[?]	CRAN (R 4.0.2)
testthat	3.1.3	2022-03-29	[2]	CRAN (R 4.0.5)
tibble	3.1.6	2021-11-07	[2]	CRAN (R 4.0.2)
tidyselect	1.1.2	2022-02-21	[2]	CRAN (R 4.0.5)
tzdb	0.3.0	2022-03-28	[2]	CRAN (R 4.0.5)
usethis	* 2.1.5	2021-12-09	[2]	CRAN (R 4.0.2)
utf8	1.2.2	2021-07-24	[2]	CRAN (R 4.0.2)
vctrs	0.4.0	2022-03-30	[2]	CRAN (R 4.0.5)
vroom	1.5.7	2021-11-30	[2]	CRAN (R 4.0.2)
withr	2.5.0	2022-03-03	[2]	CRAN (R 4.0.5)
xfun	0.30	2022-03-02	[2]	CRAN (R 4.0.5)
yaml	2.3.5	2022-02-21	[2]	CRAN (R 4.0.5)

[1] /Users/paulyna/Documents/Github/Gene Analysis/renv/library/R-4.0/x86\_64-apple-darwin17.0

[2] /Library/Frameworks/R.framework/Versions/4.0/Resources/library

P -- Loaded and on-disk path mismatch.

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