

Untitled

Zaid Sameer

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#trying plotting using data published from our lab (Brown Lab) (Stokes et. al. 2017)

data.stokes <- read.csv("book1.csv")

head(data.stokes)

##               Compound    R1    R2
## 1          ARTEMETHER 0.001 0.001
## 2      CHLOROXYLENOL 0.000 0.001
## 3  DESVENLAFAXINE SUCCINATE 0.001 0.001
## 4 CHLORPHENIRAMINE (S) MALEATE 0.000 0.001
## 5          CYCLAMIC ACID 0.000 0.000
## 6      CHLORPROMAZINE 0.001 0.001

str(data.stokes)

## 'data.frame':   1440 obs. of  3 variables:
##  $ Compound: Factor w/ 1440 levels "2-THIOURACIL",...: 112 313 432 314 386 315 1212 316 819 319 ...
##  $ R1      : num  0.001 0 0.001 0 0 0.001 0.001 0.001 0.006 ...
##  $ R2      : num  0.001 0.001 0.001 0.001 0 0.001 0.001 0 0.001 0.001 ...

# plotting data, making hits red, adding text to the hits to label them using the Compound variable

plot(data.stokes$R1,data.stokes$R2,
     pch = 20, # symbol
     cex = 1.2, # size of symbol
     col = "black", # symbol colour
     xlim = c(0, 0.5),
     ylim = c(0, 0.5),
     xlab = "Optical Density Replicate 2",
     ylab = "Optical Density Replicate 1",
     main = "Screening 1440 Compounds for Growth Rescue",
     bty="n")
indexgrowth <- which(data.stokes$R1 > 0.05)

points(data.stokes$R1[indexgrowth], data.stokes$R2[indexgrowth], col = "red", pch = 20, cex = 1.2)

text(
  data.stokes$R1[indexgrowth],
  data.stokes$R2[indexgrowth],
  data.stokes$Compound[indexgrowth],
  adj = -0.2,
  cex = 0.5,
  font = 4)
```

Screening 1440 Compounds for Growth Rescue

