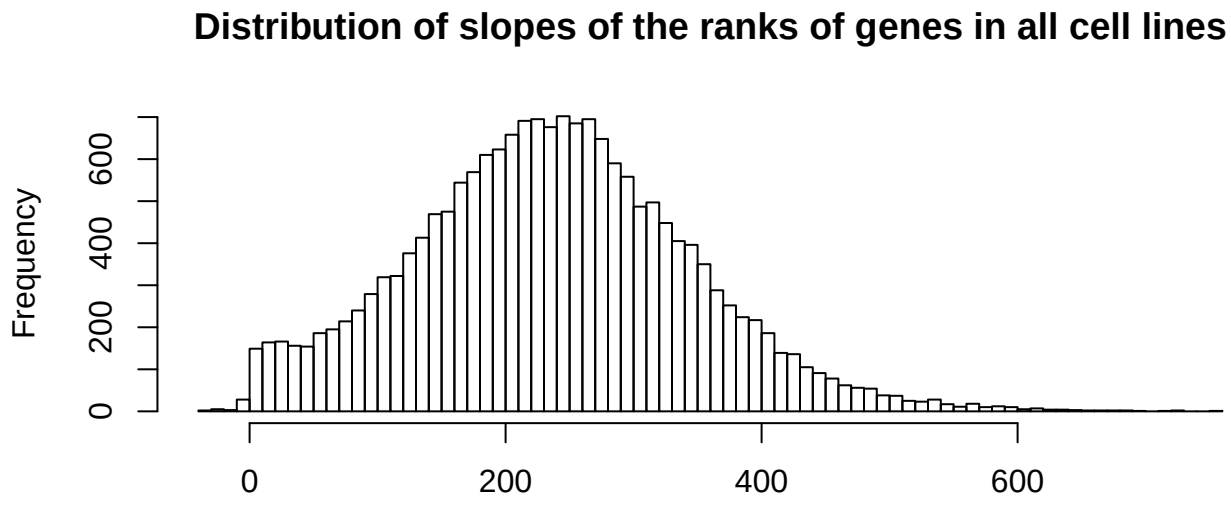
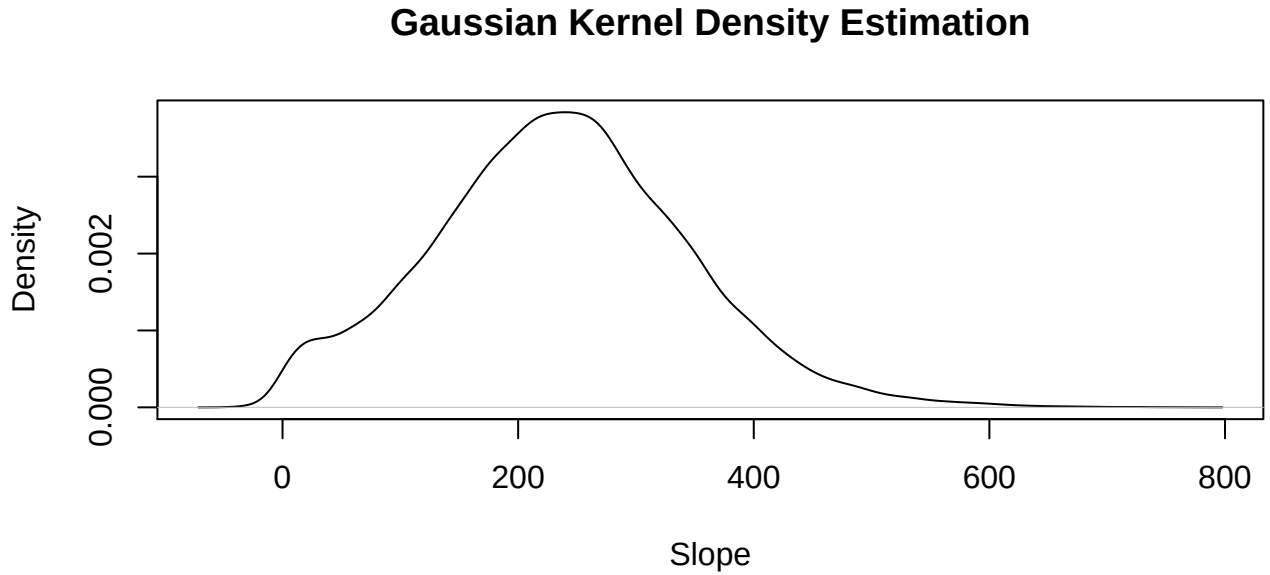
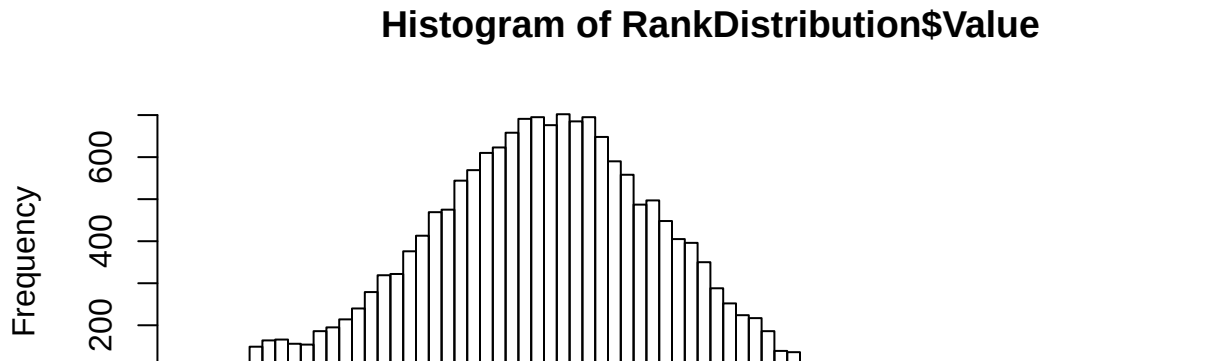
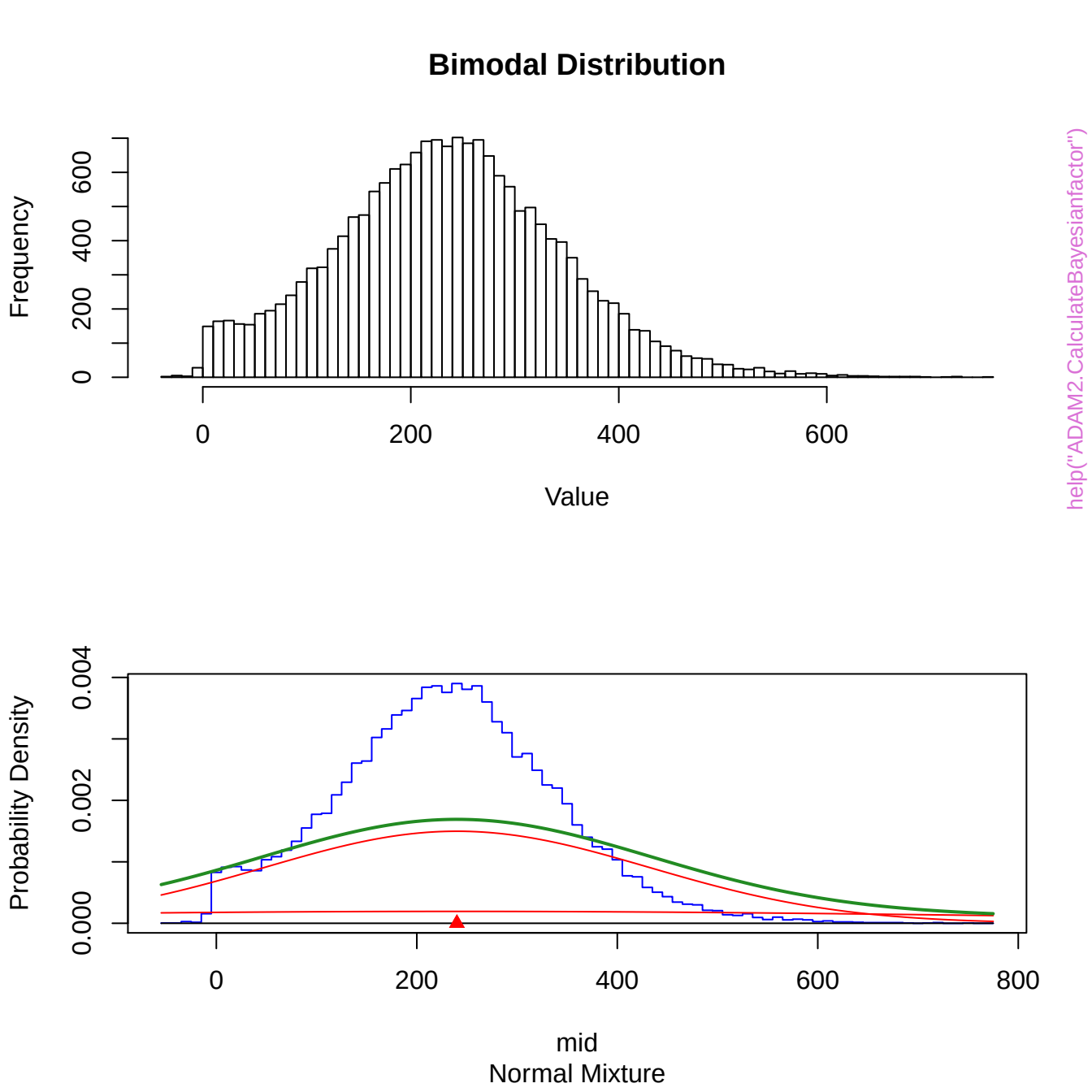


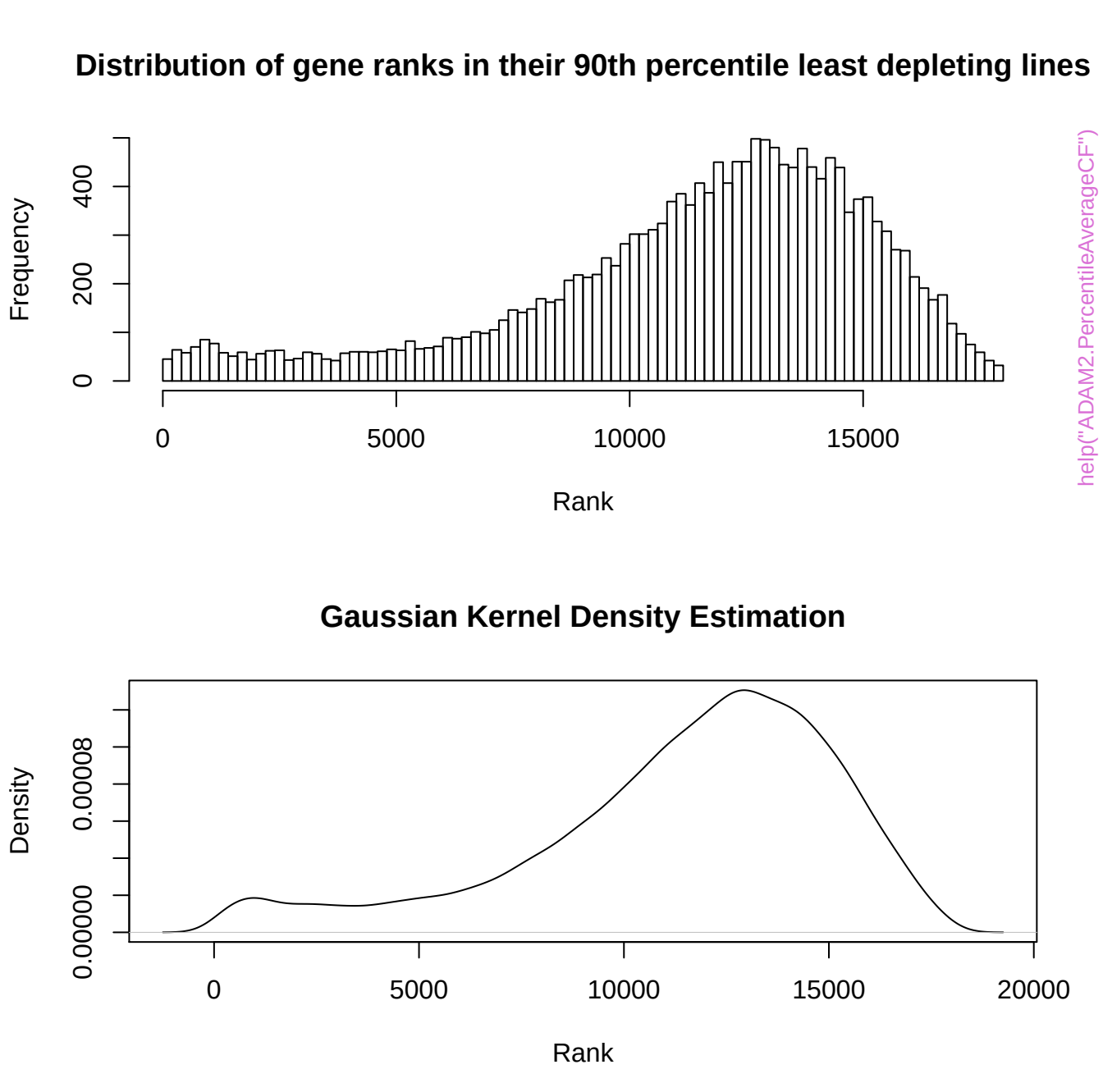


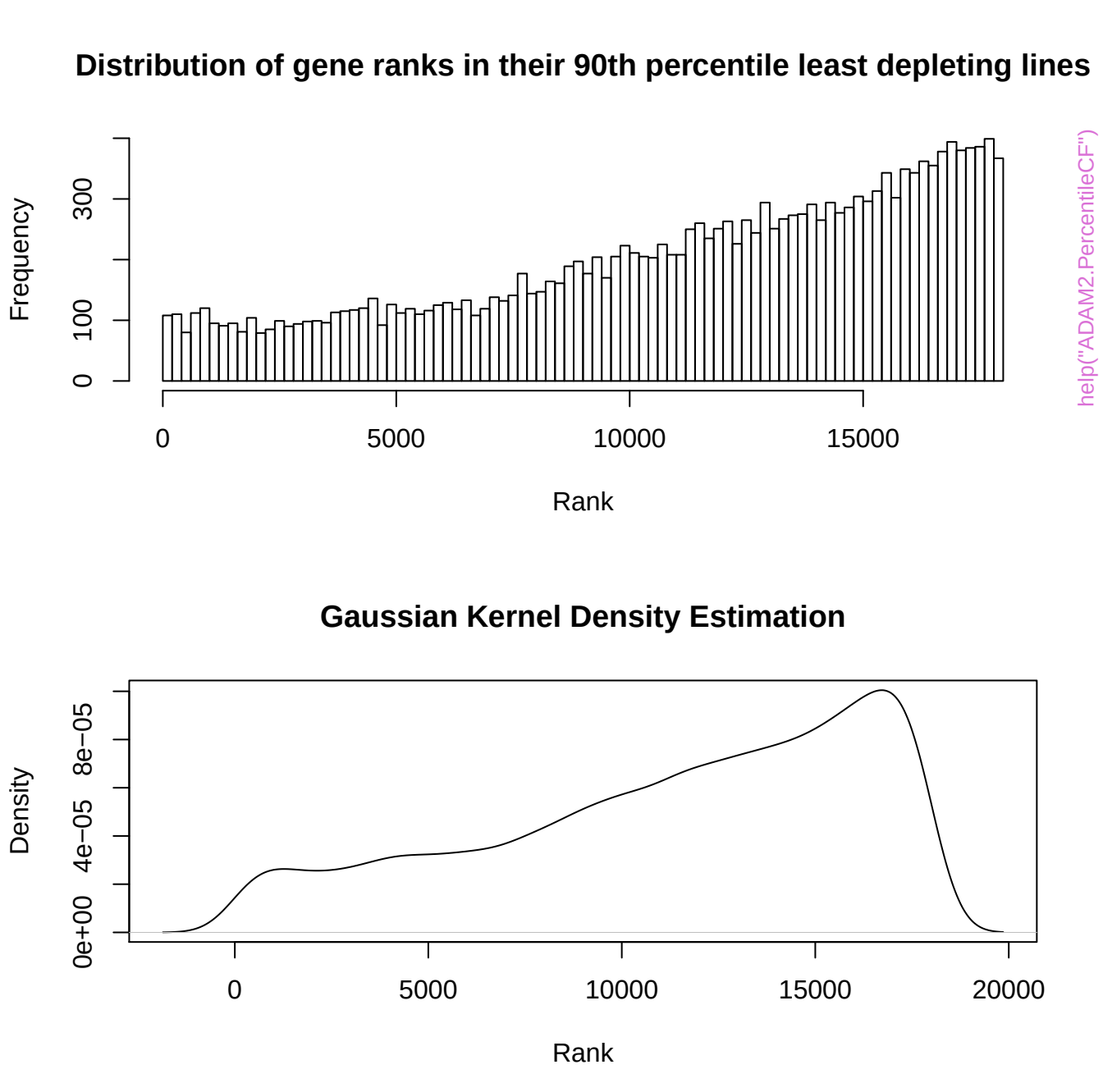
help("ADAM2.CalculateBayesianfactor")

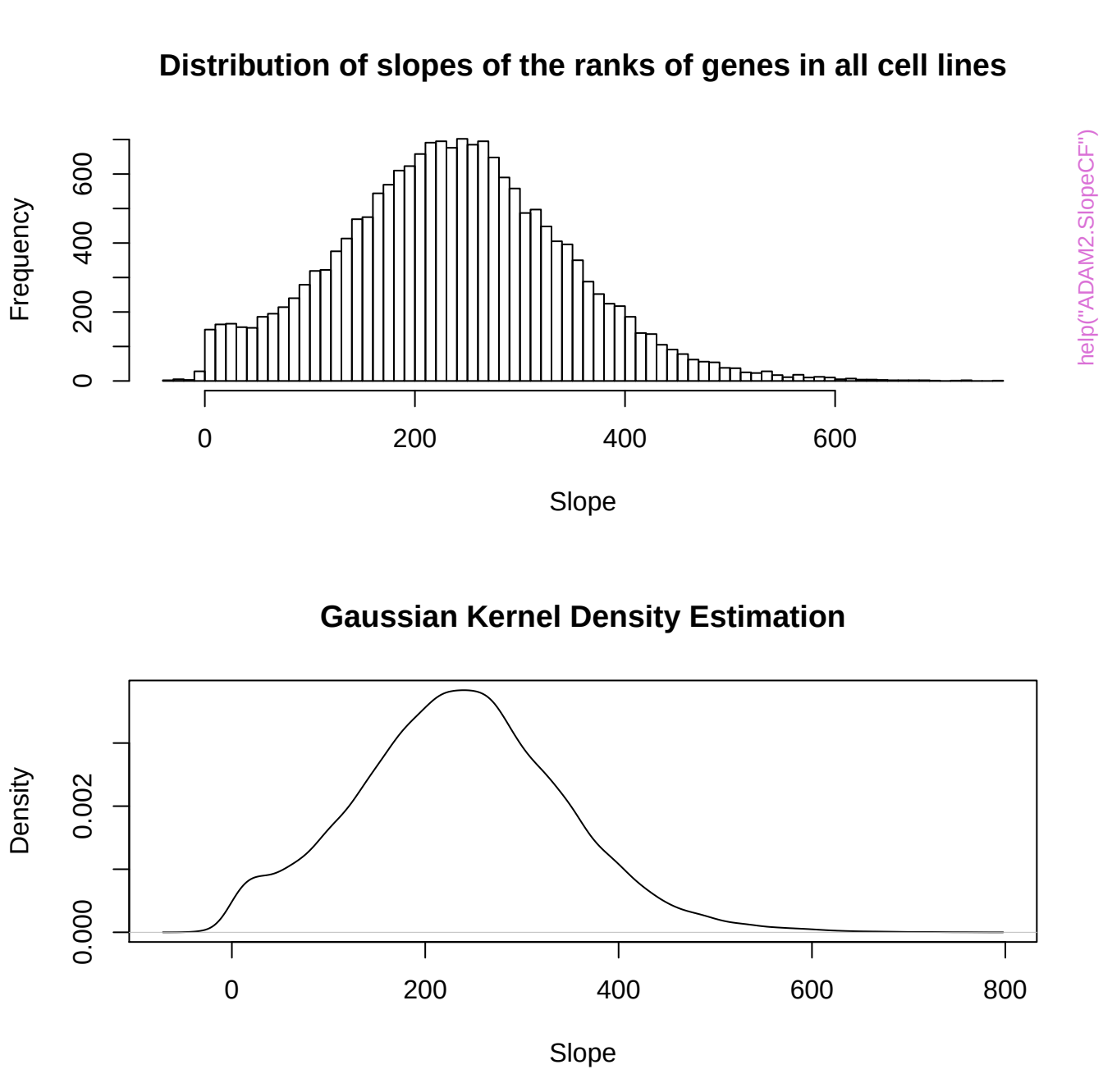


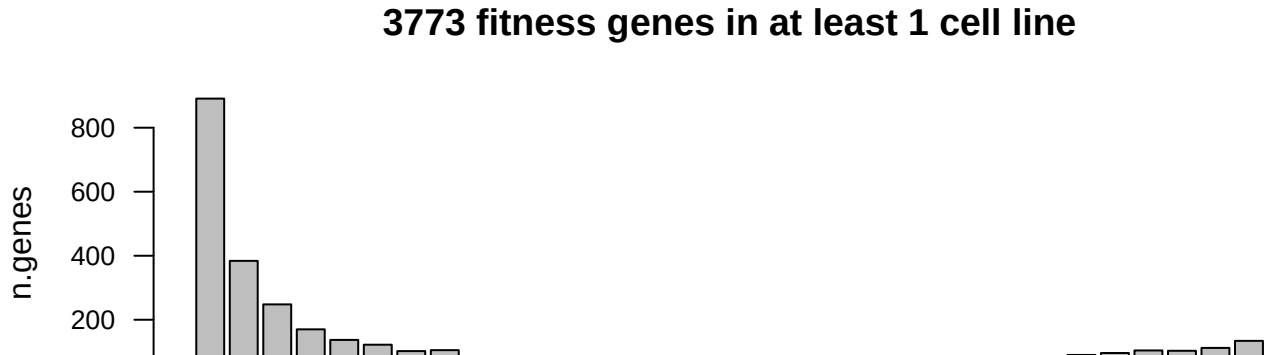
help("ADAM2.CalculateBayesianfactor")

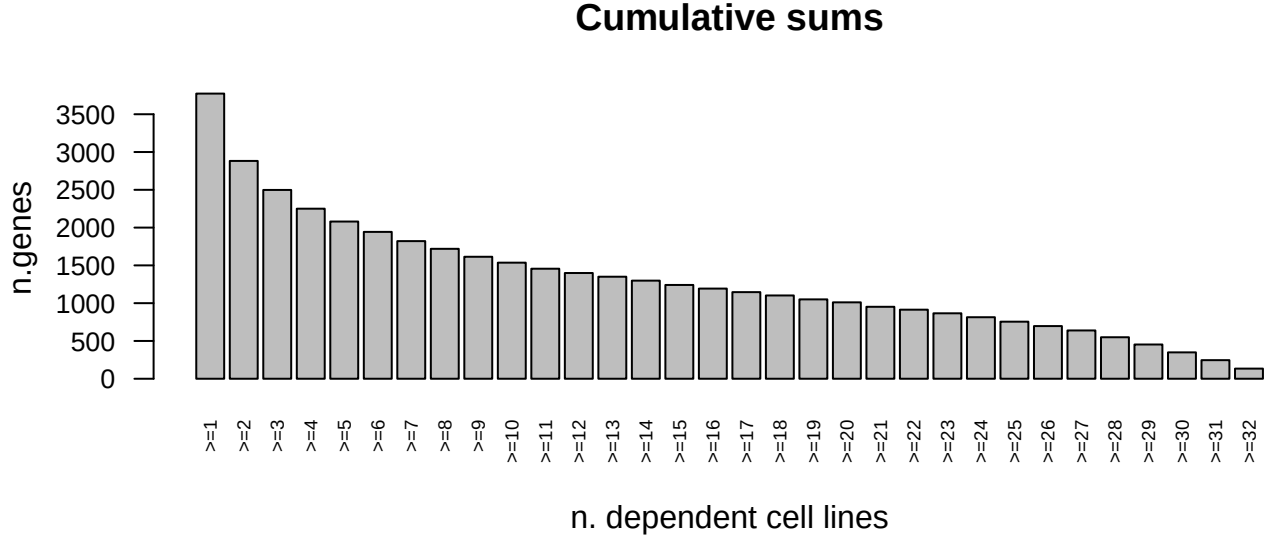

Bimodal Distribution
Frequency
0
200
400
600
0
200
400
600
Value
Probability Density
0.000
0.002
0.004
0
200
400
600
800
mid
Normal Mixture
help("ADAM2.CalculateBayesianfactor")


Distribution of gene ranks in their 90th percentile least depleting lines
Frequency
0
200
400
0
5000
10000
15000
Rank
help("ADAM2.PercentileAverageCF")
Gaussian Kernel Density Estimation
Density
0.00000
0.00008
0
5000
10000
15000
20000
Rank

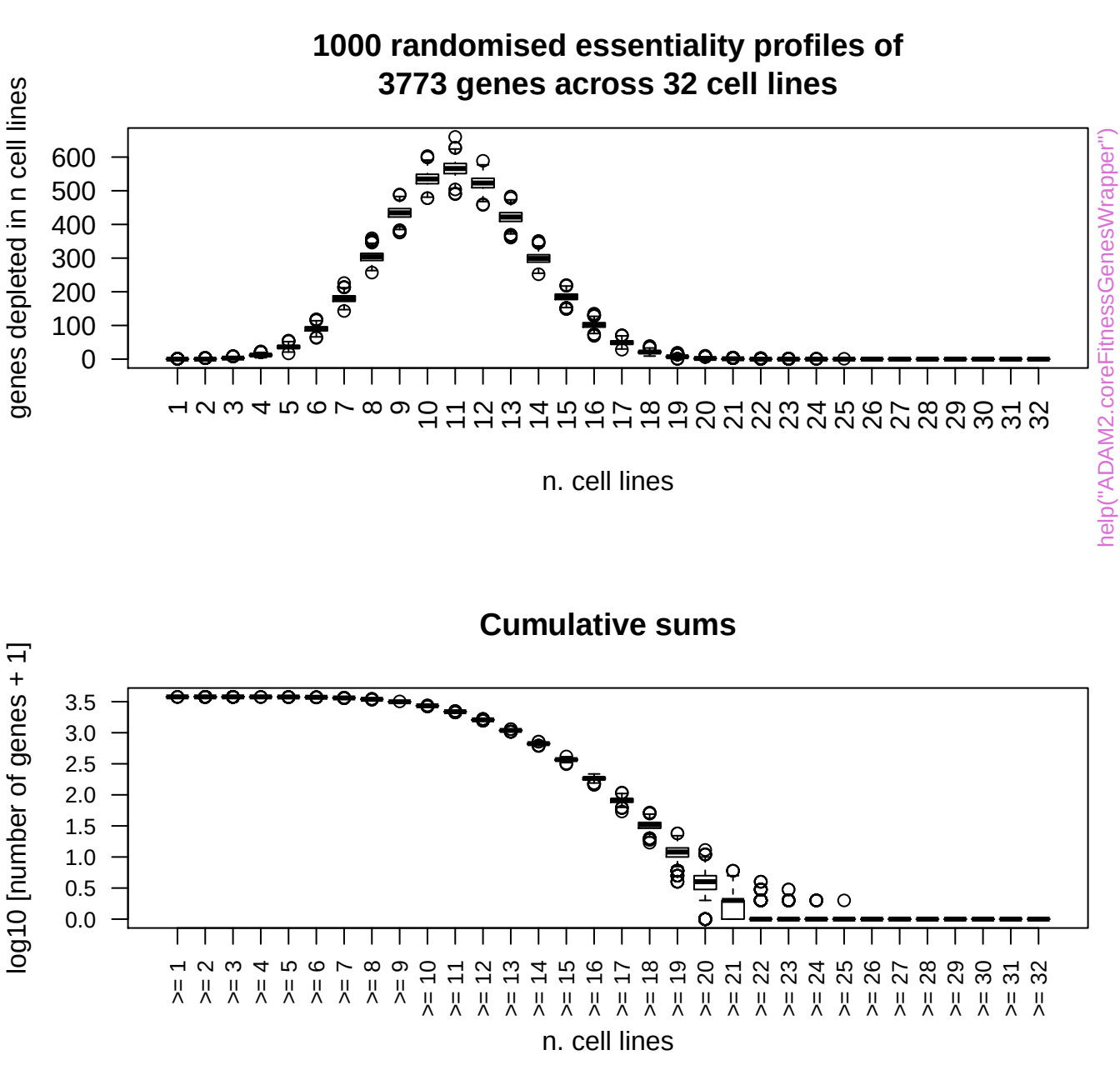

Distribution of gene ranks in their 90th percentile least depleting lines
Frequency
0
100
300
0
5000
10000
15000
Rank
help("ADAM2.PercentileCF")
Gaussian Kernel Density Estimation
Density
0e+00
4e−05
8e−05
0
5000
10000
15000
20000
Rank

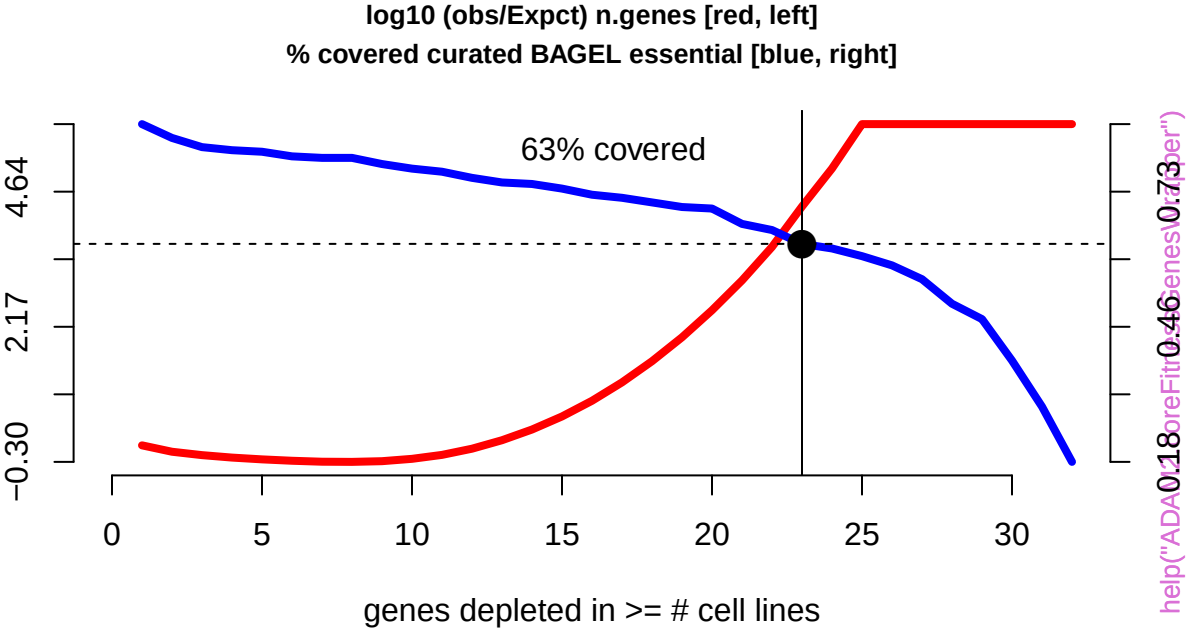

Distribution of slopes of the ranks of genes in all cell lines
Frequency
0
200
400
600
0
200
400
600
Slope
help("ADAM2.SlopeCF")
Gaussian Kernel Density Estimation
Density
0.000
0.002
0
200
400
600
800
Slope

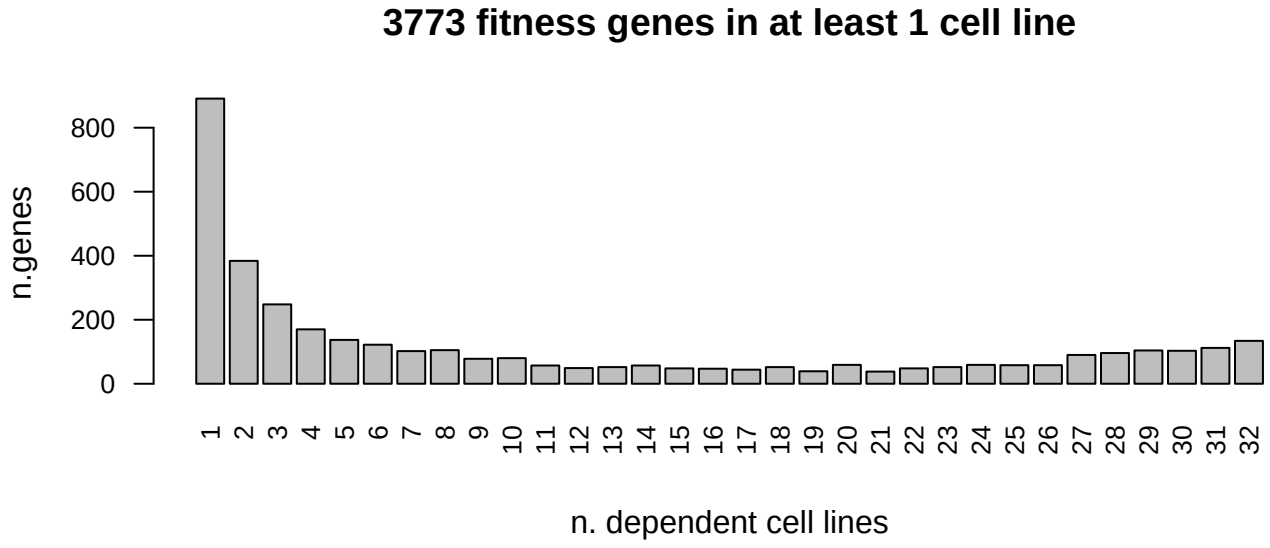


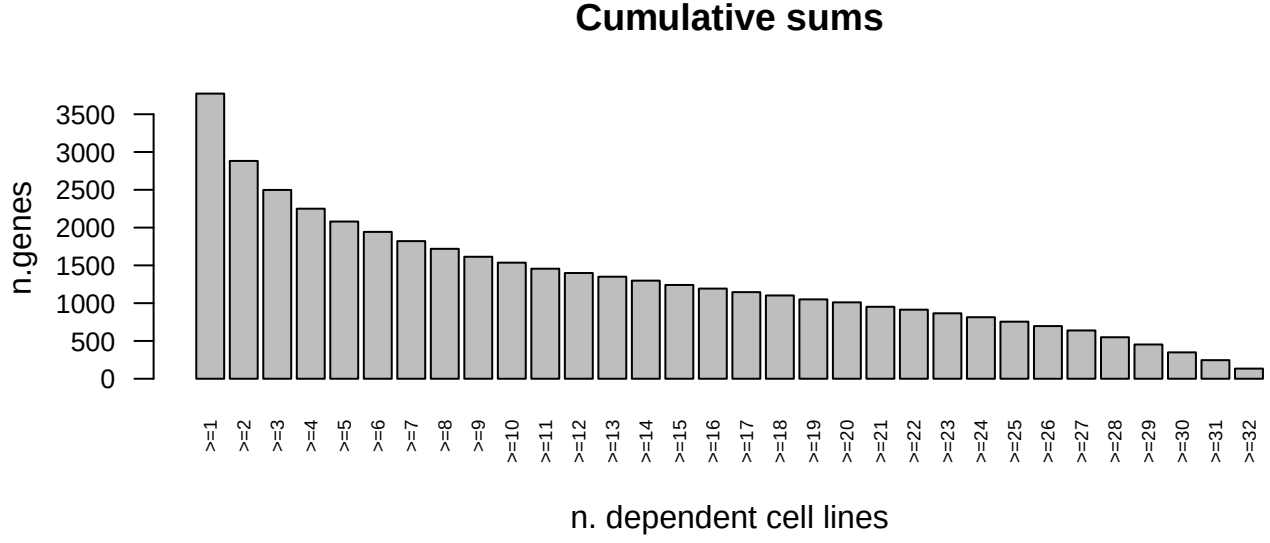


help("ADAM2.coreFitnessGenesWrapper")

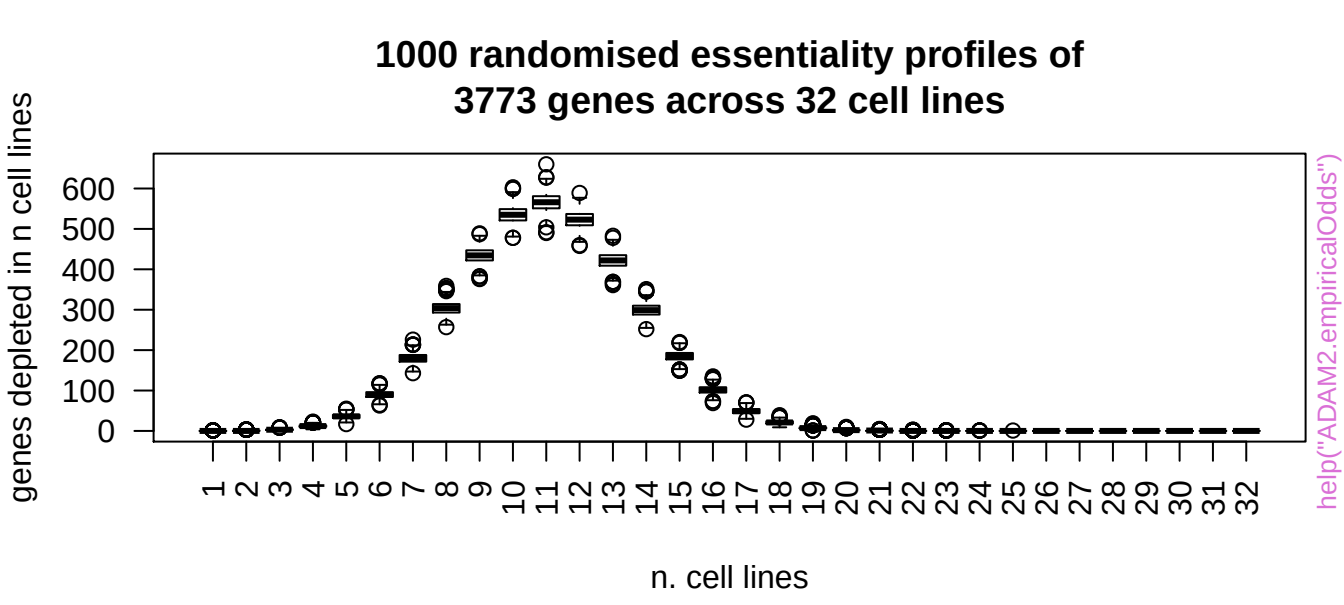

1000 randomised essentiality profiles of
3773 genes across 32 cell lines
genes depleted in n cell lines
0
100
200
300
400
500
600
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
n. cell lines
help("ADAM2.coreFitnessGenesWrapper")
Cumulative sums
log10 [number of genes + 1]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
>= 1 >= 2 >= 3 >= 4 >= 5 >= 6 >= 7 >= 8 >= 9 >= 10 >= 11 >= 12 >= 13 >= 14 >= 15 >= 16 >= 17 >= 18 >= 19 >= 20 >= 21 >= 22 >= 23 >= 24 >= 25 >= 26 >= 27 >= 28 >= 29 >= 30 >= 31 >= 32
n. cell lines

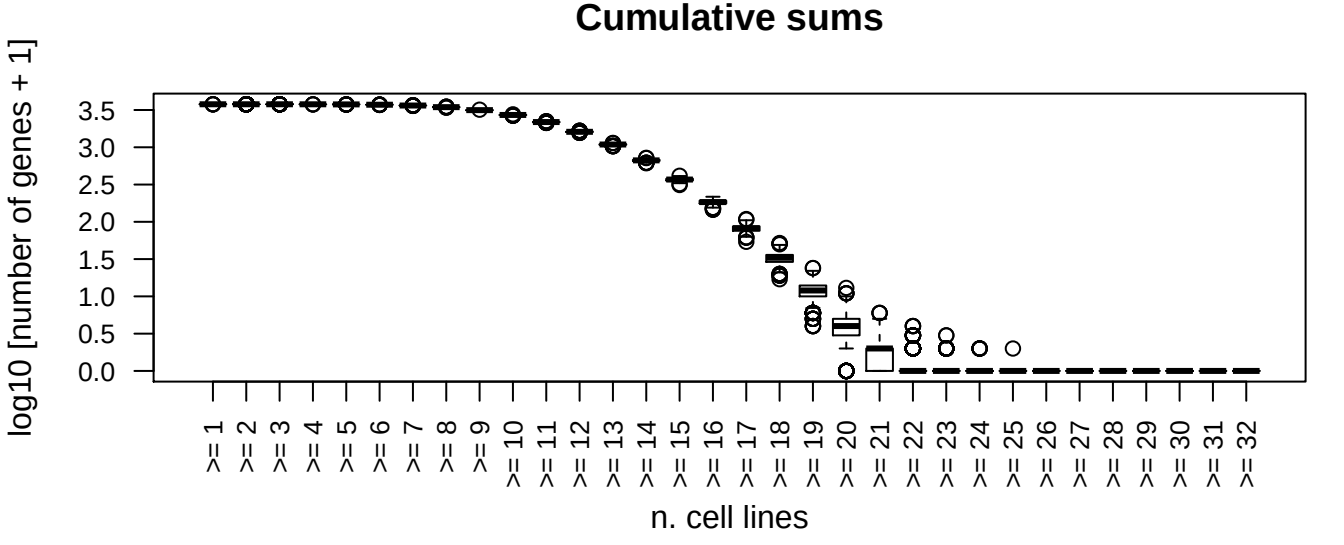

log10 (obs/Expct) n.genes [red, left]
% covered curated BAGEL essential [blue, right]
63% covered
4.64
2.17
−0.30
0.73
0.46
0.18
0
5
10
15
20
25
30
genes depleted in >= # cell lines
help("ADAM12.ScoreFitr.GenesVrapper")

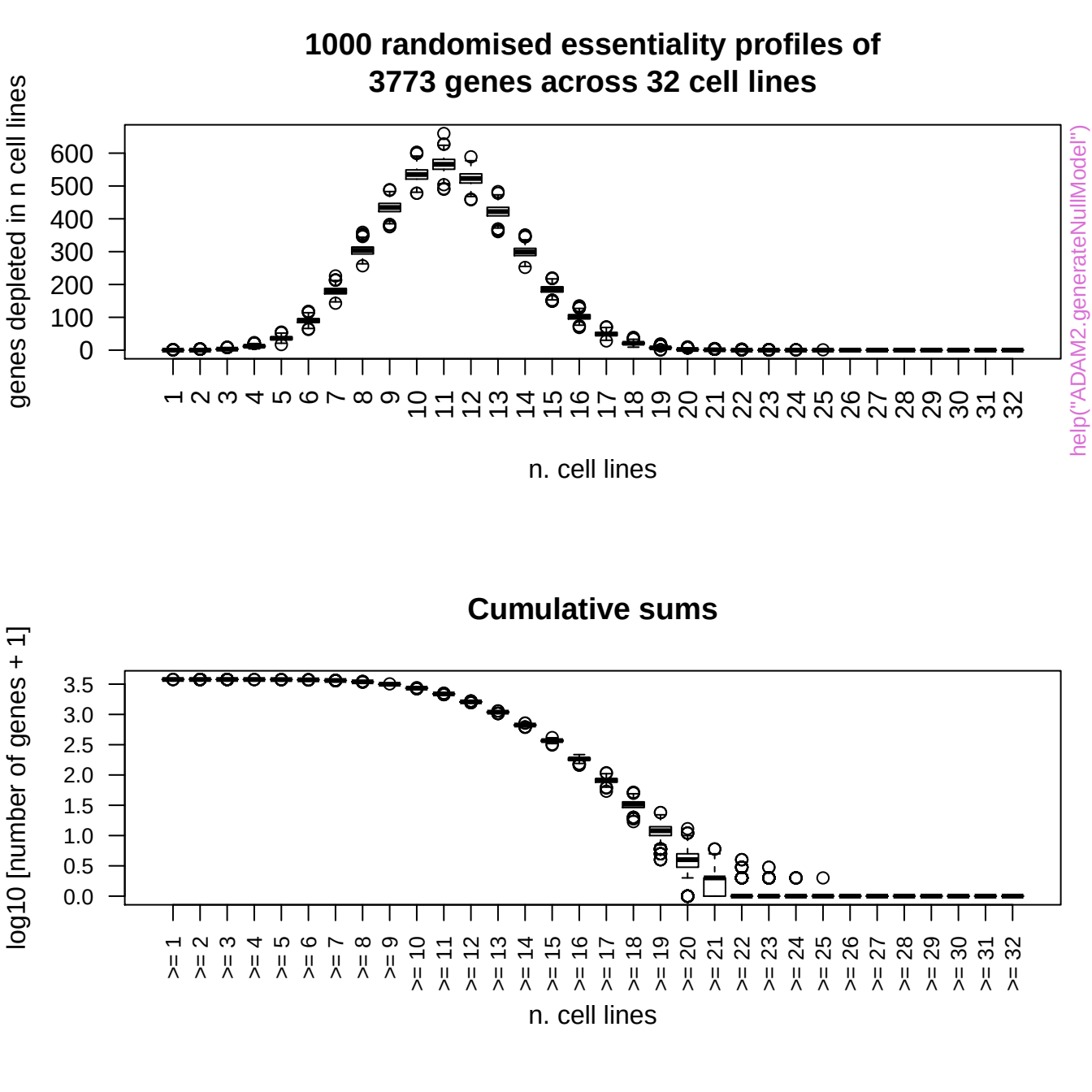


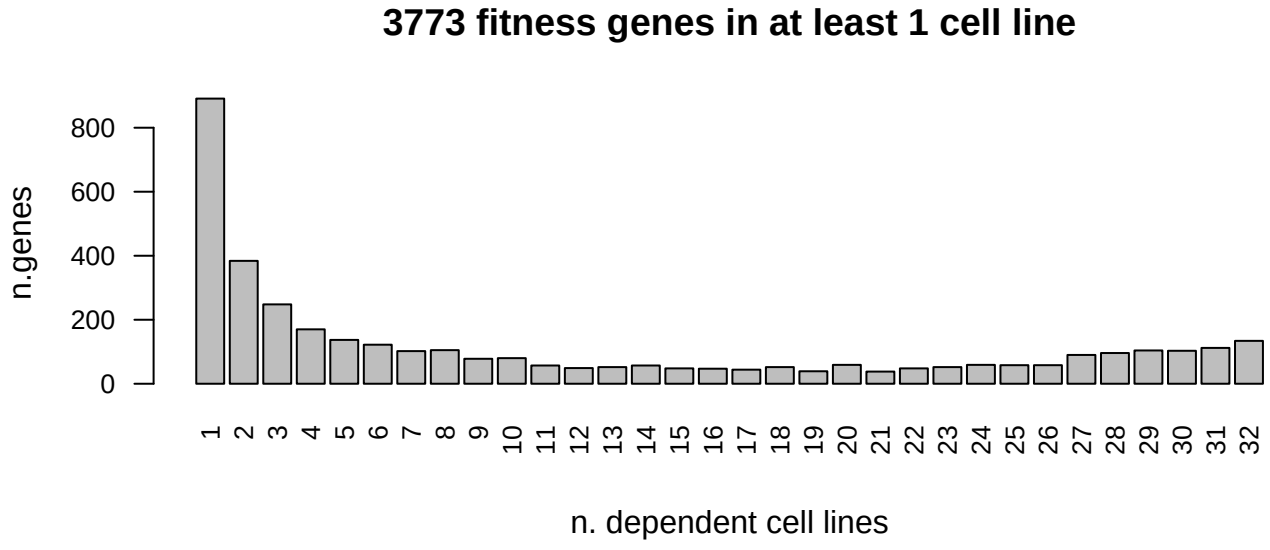


help("ADAM2.empiricalOdds")

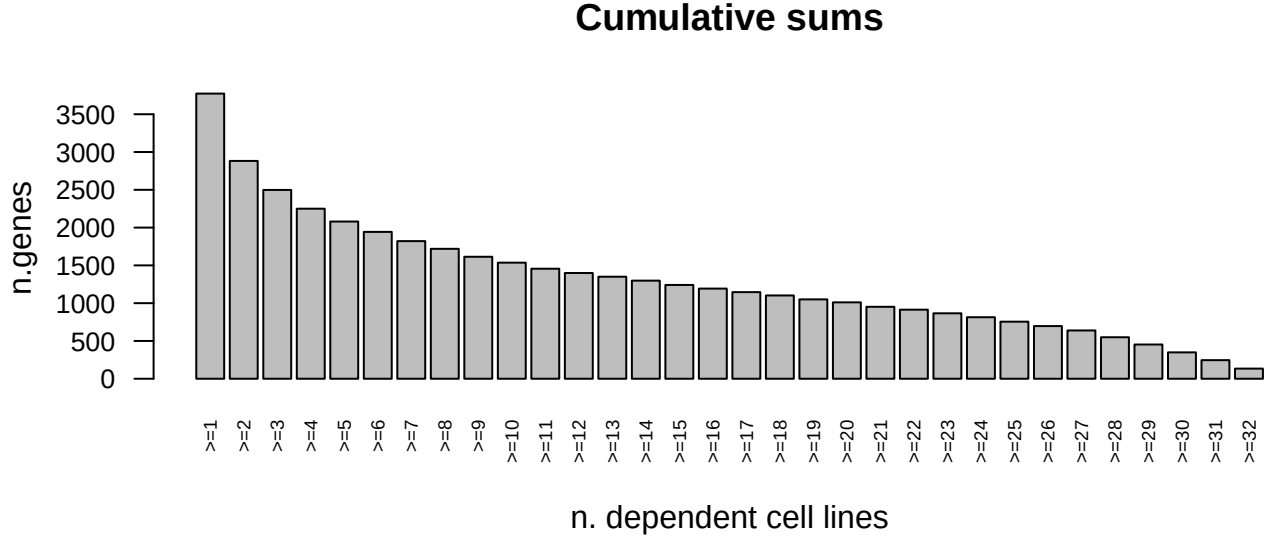

1000 randomised essentiality profiles of
3773 genes across 32 cell lines
genes depleted in n cell lines
0
100
200
300
400
500
600
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
n. cell lines
help("ADAM2.empiricalOdds")

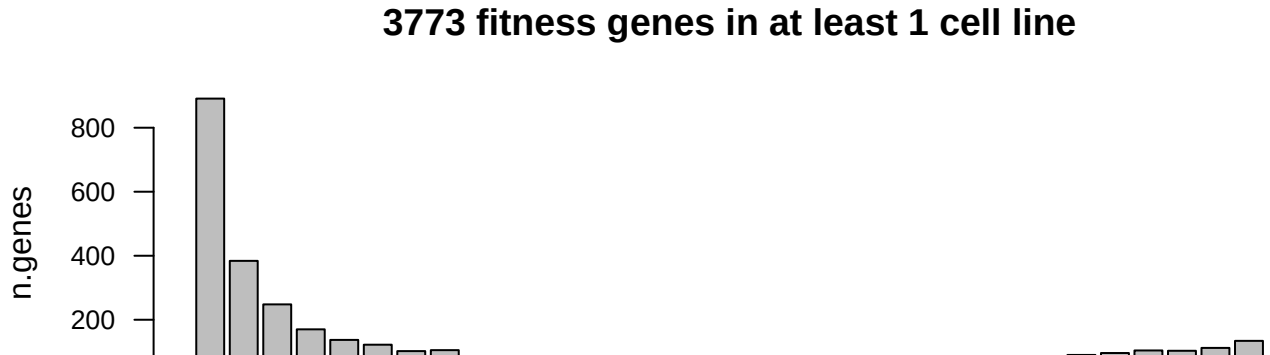

Cumulative sums
log10 [number of genes + 1]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
>= 1 >= 2 >= 3 >= 4 >= 5 >= 6 >= 7 >= 8 >= 9 >= 10 >= 11 >= 12 >= 13 >= 14 >= 15 >= 16 >= 17 >= 18 >= 19 >= 20 >= 21 >= 22 >= 23 >= 24 >= 25 >= 26 >= 27 >= 28 >= 29 >= 30 >= 31 >= 32
n. cell lines

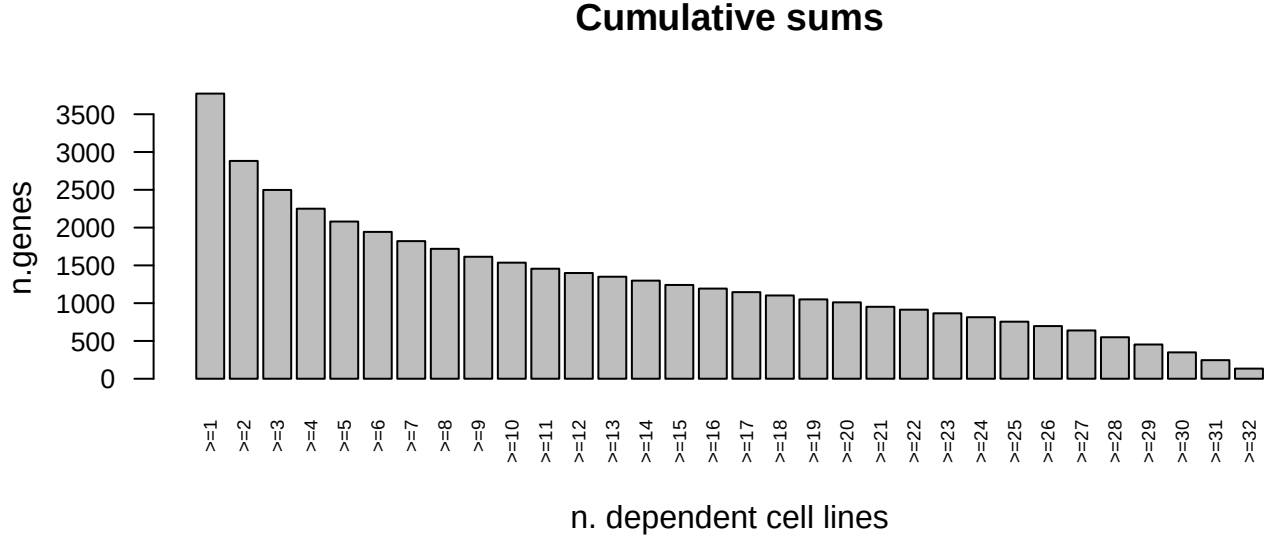

1000 randomised essentiality profiles of
3773 genes across 32 cell lines
genes depleted in n cell lines
0
100
200
300
400
500
600
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
n. cell lines
help("ADAM2.generateNullModel")
Cumulative sums
log10 [number of genes + 1]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
>= 1 >= 2 >= 3 >= 4 >= 5 >= 6 >= 7 >= 8 >= 9 >= 10 >= 11 >= 12 >= 13 >= 14 >= 15 >= 16 >= 17 >= 18 >= 19 >= 20 >= 21 >= 22 >= 23 >= 24 >= 25 >= 26 >= 27 >= 28 >= 29 >= 30 >= 31 >= 32
n. cell lines



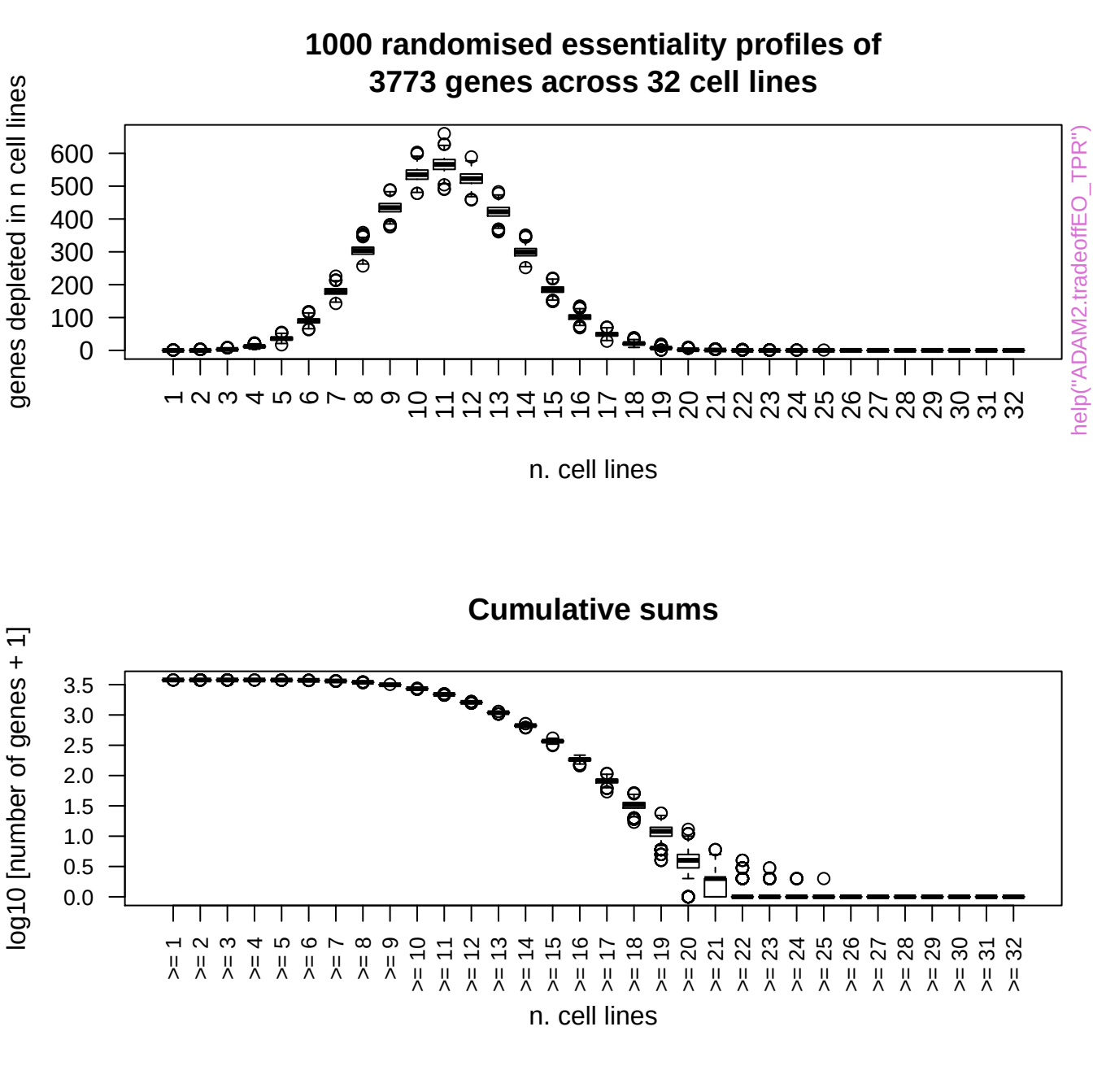
help("ADAM2.panessprofile")

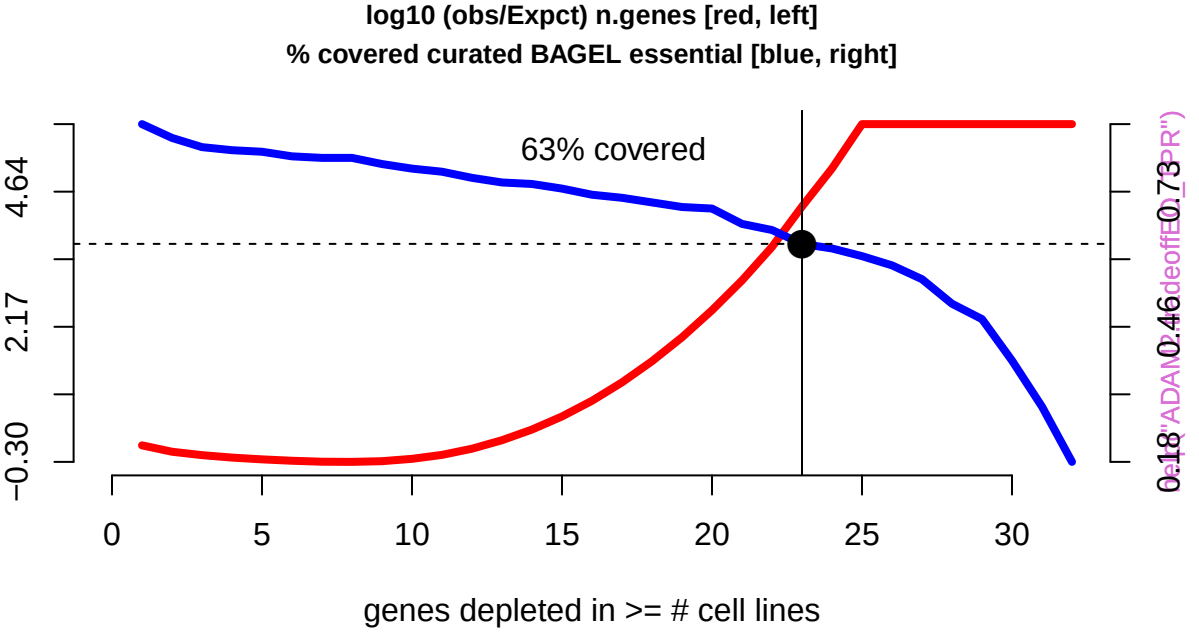


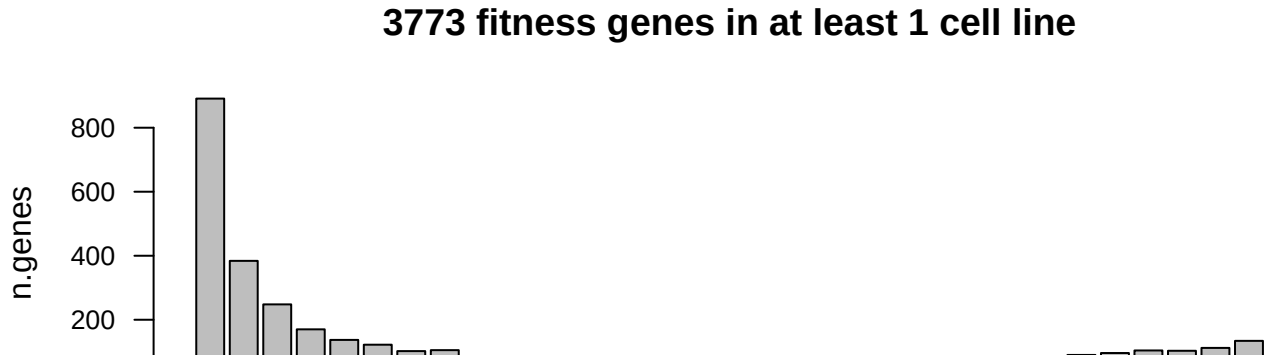


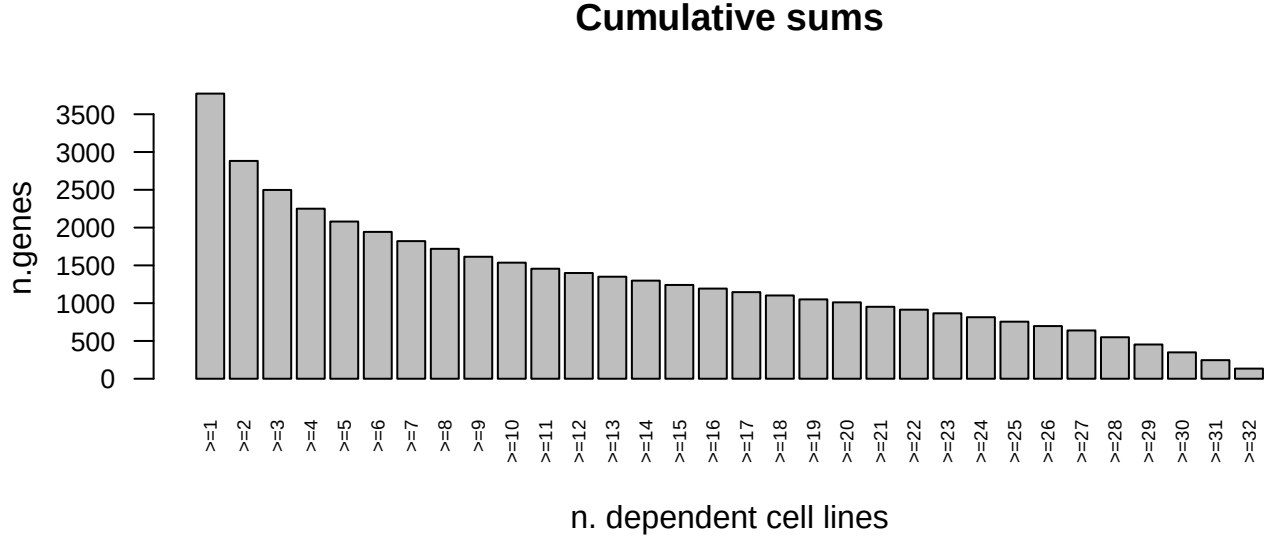


help("ADAM2.tradeoffEO_TPR")

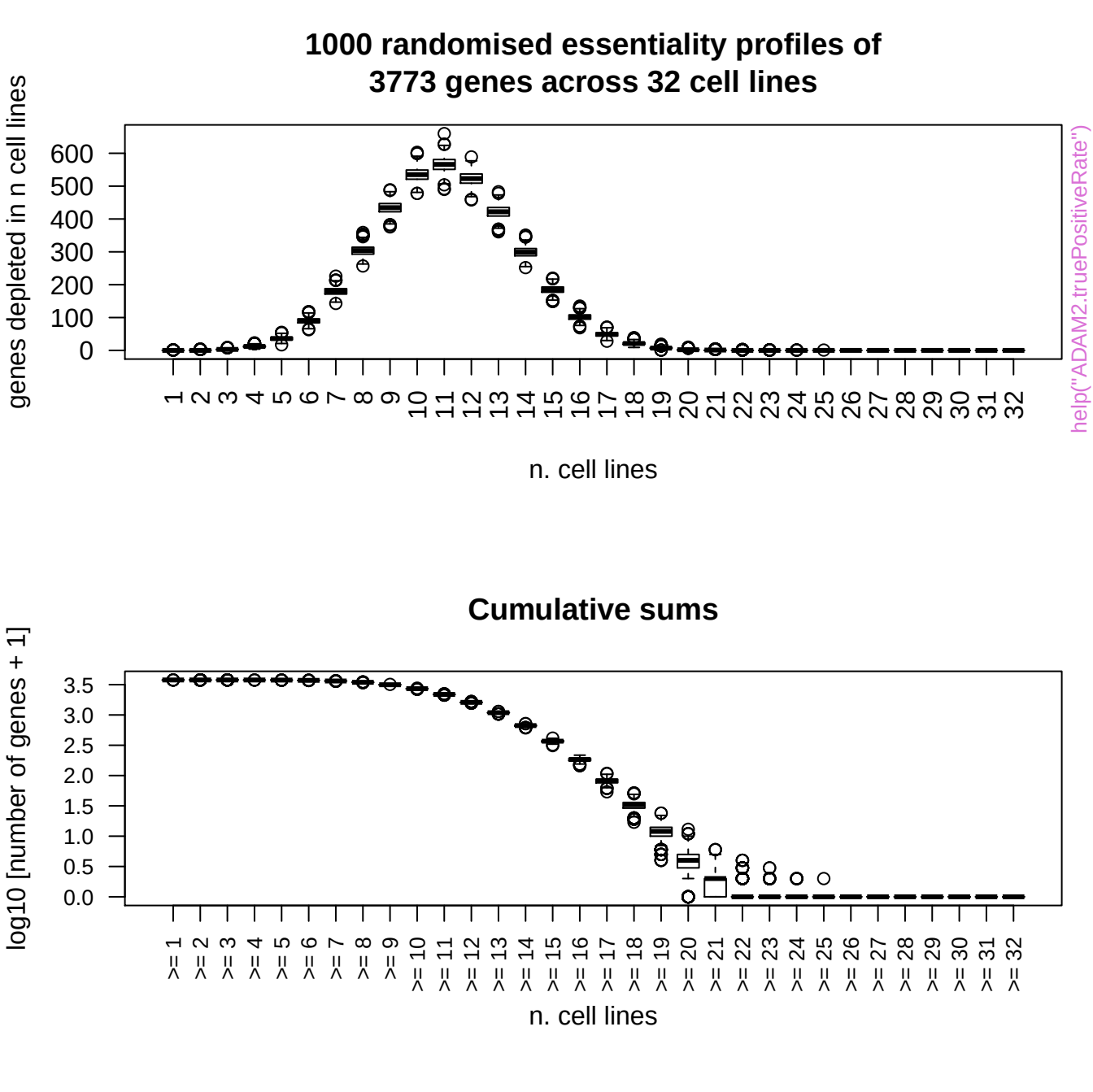

1000 randomised essentiality profiles of
3773 genes across 32 cell lines
genes depleted in n cell lines
0
100
200
300
400
500
600
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
n. cell lines
help("ADAM2.tradeoffEO_TPR")
Cumulative sums
log10 [number of genes + 1]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
>= 1 >= 2 >= 3 >= 4 >= 5 >= 6 >= 7 >= 8 >= 9 >= 10 >= 11 >= 12 >= 13 >= 14 >= 15 >= 16 >= 17 >= 18 >= 19 >= 20 >= 21 >= 22 >= 23 >= 24 >= 25 >= 26 >= 27 >= 28 >= 29 >= 30 >= 31 >= 32
n. cell lines


log10 (obs/Expct) n.genes [red, left]
% covered curated BAGEL essential [blue, right]
63% covered
4.64
2.17
−0.30
0.73
0.46
0.18
0
5
10
15
20
25
30
genes depleted in >= # cell lines





help("ADAM2.truePositiveRate")


1000 randomised essentiality profiles of
3773 genes across 32 cell lines
genes depleted in n cell lines
0
100
200
300
400
500
600
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
n. cell lines
help("ADAM2.truePositiveRate")
Cumulative sums
log10 [number of genes + 1]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
>= 1 >= 2 >= 3 >= 4 >= 5 >= 6 >= 7 >= 8 >= 9 >= 10 >= 11 >= 12 >= 13 >= 14 >= 15 >= 16 >= 17 >= 18 >= 19 >= 20 >= 21 >= 22 >= 23 >= 24 >= 25 >= 26 >= 27 >= 28 >= 29 >= 30 >= 31 >= 32
n. cell lines