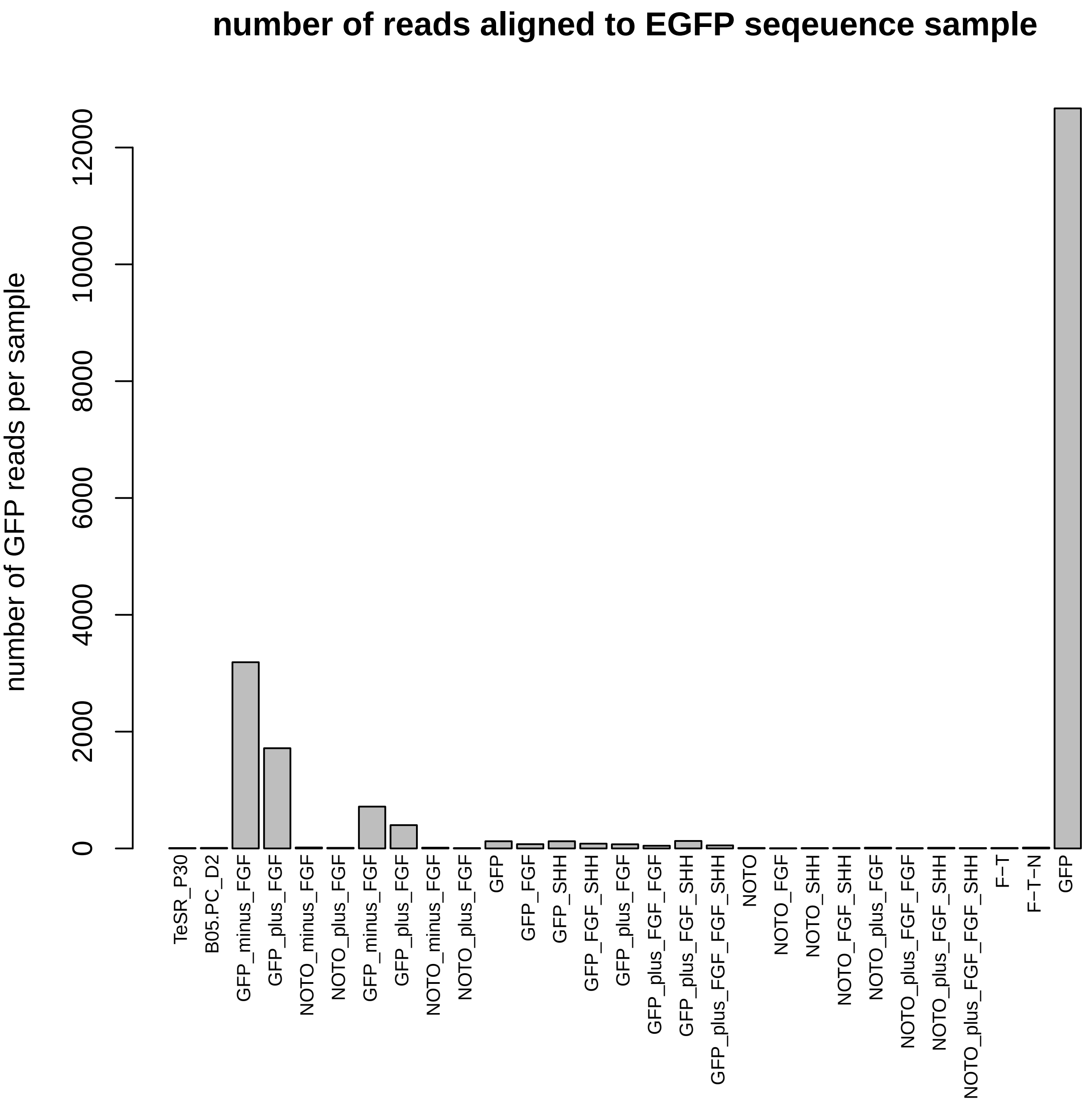
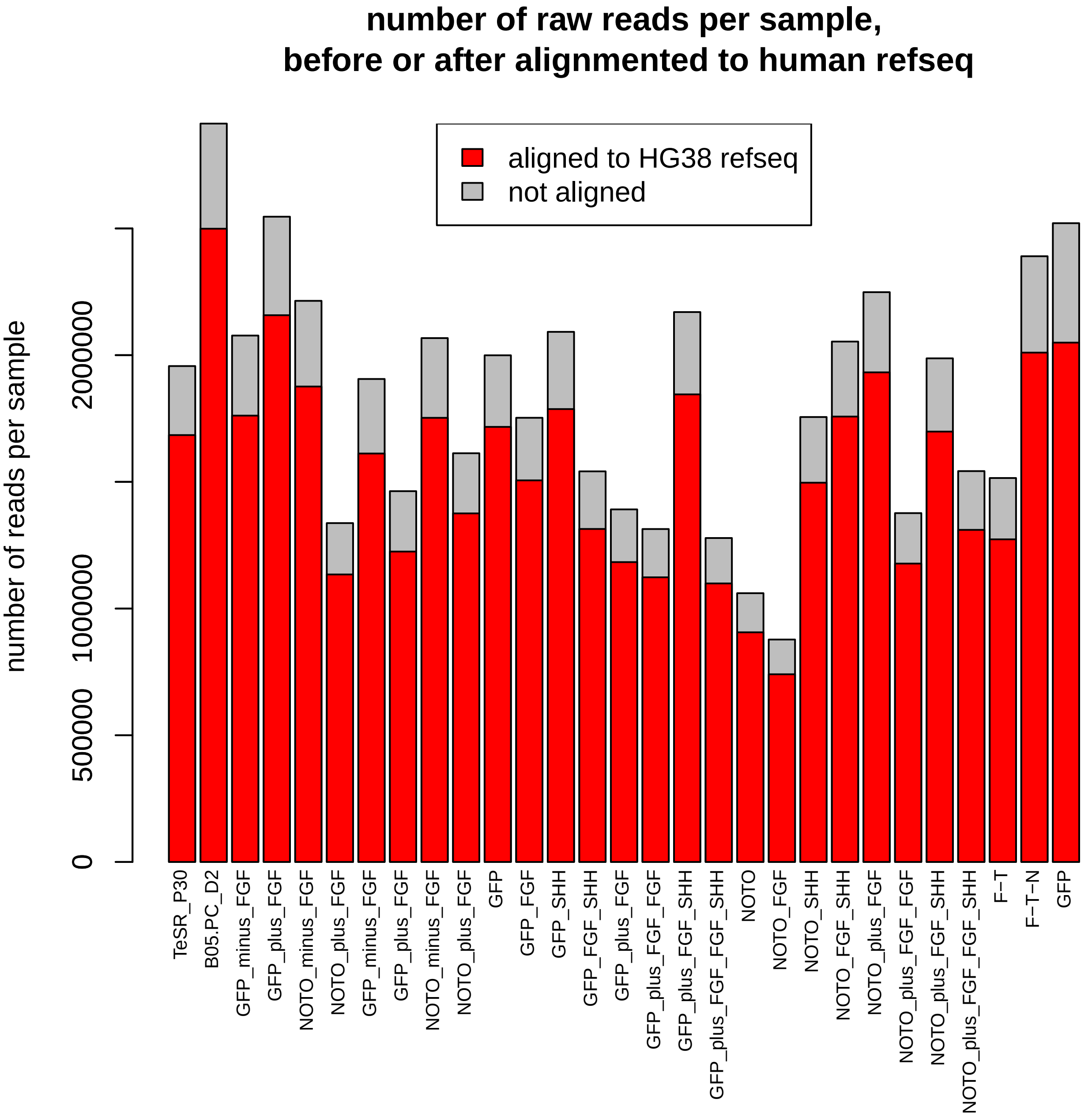
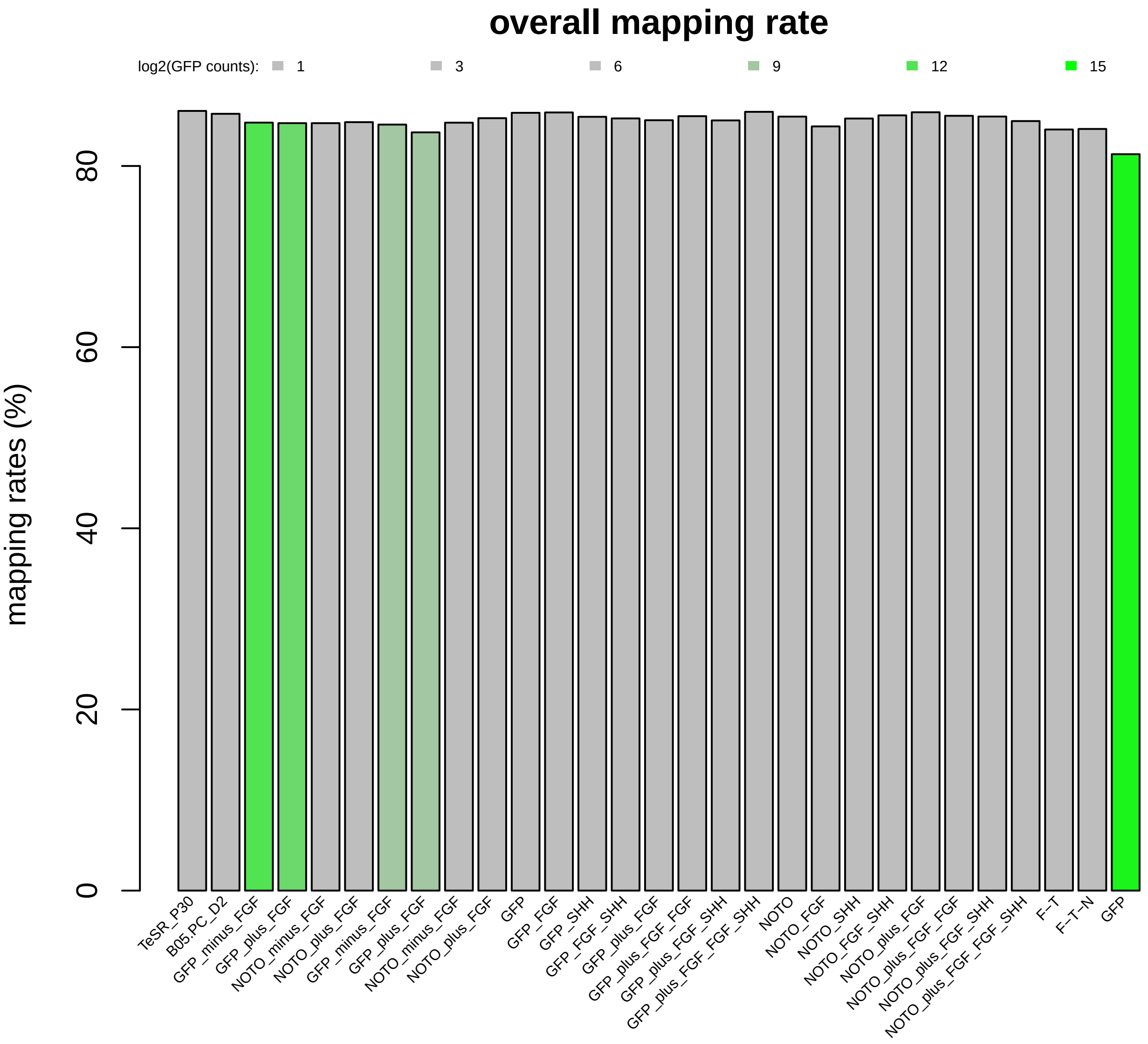
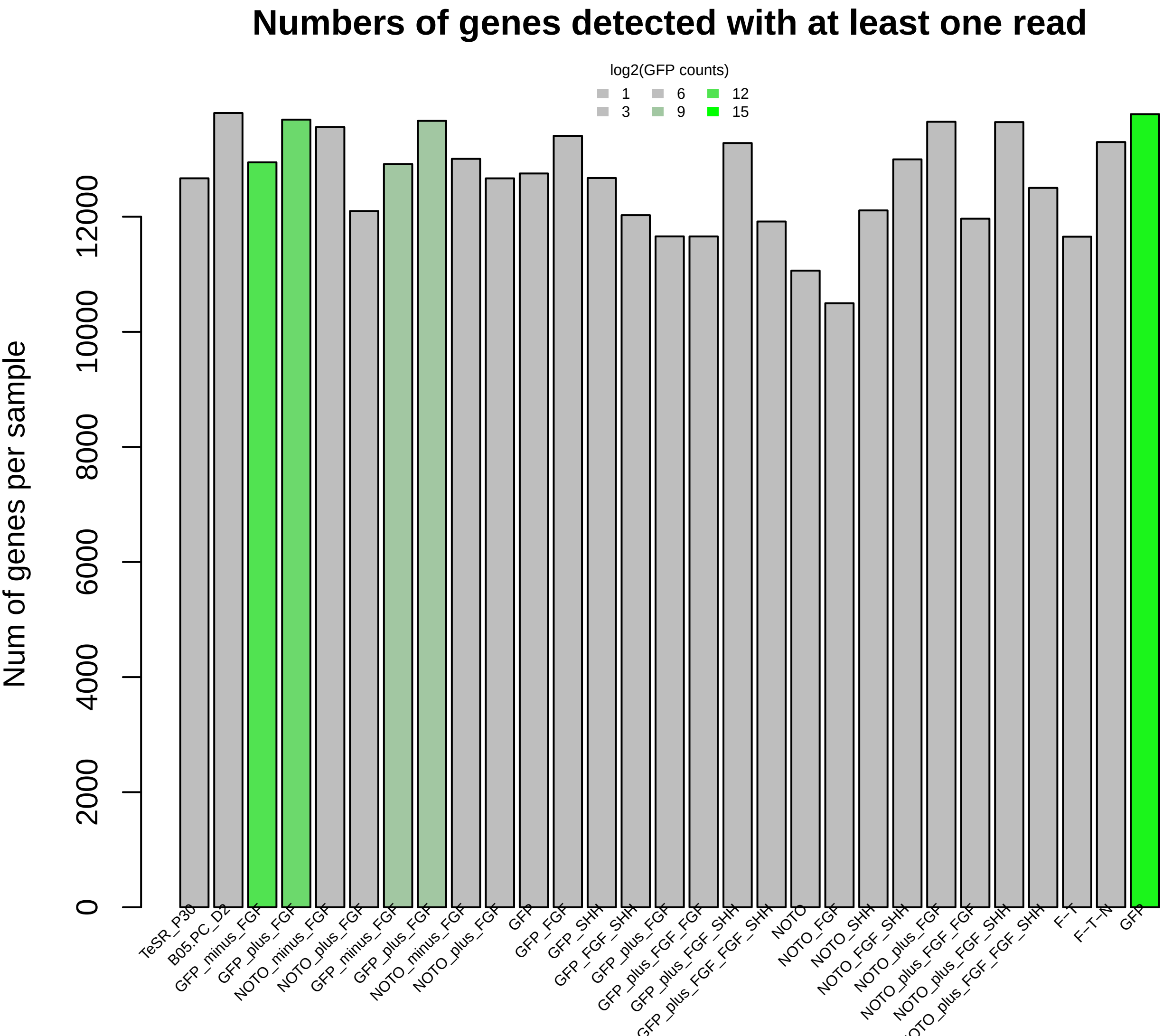
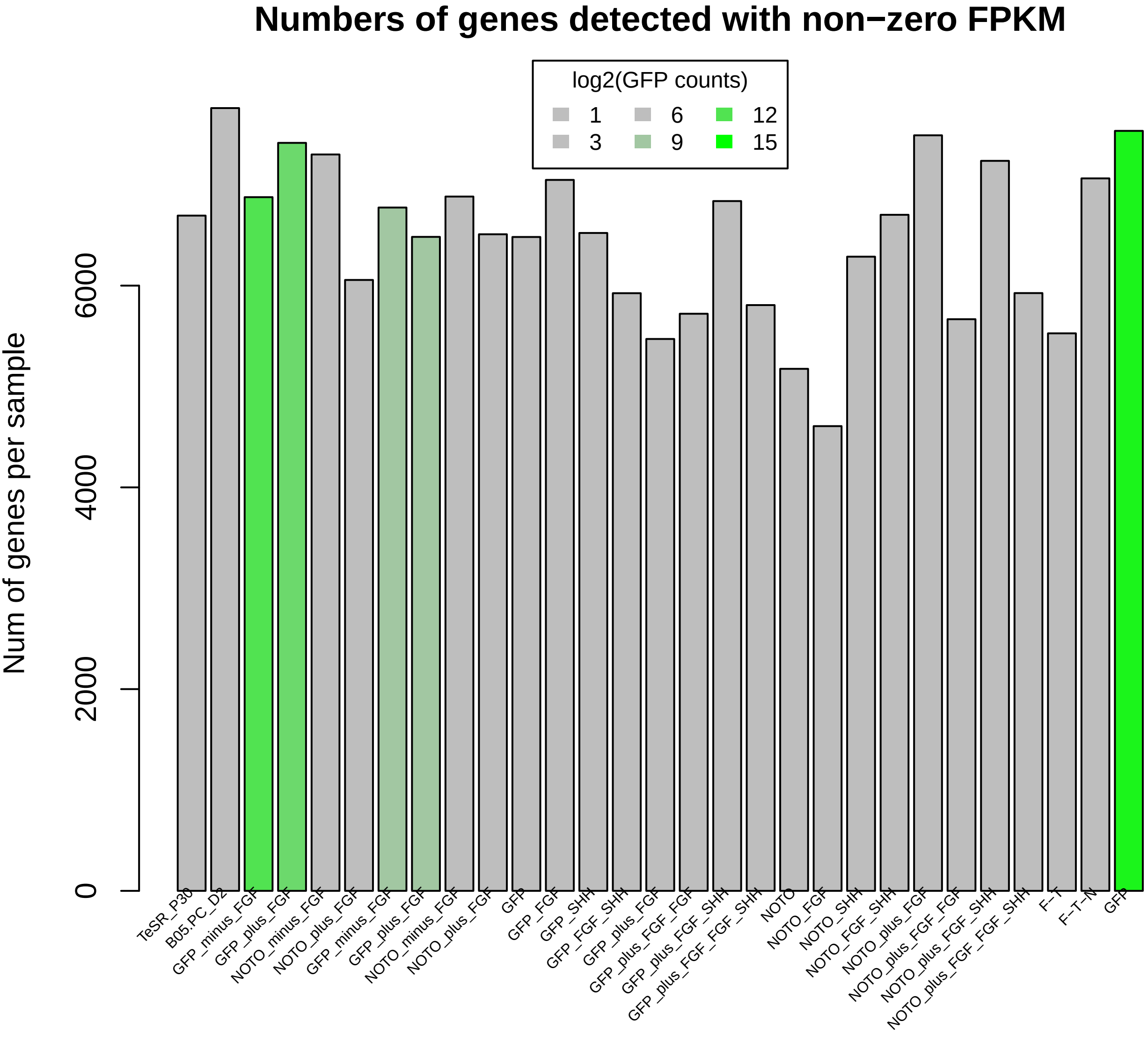

number of reads aligned to EGFP seqeuence sample
number of GFP reads per sample
0
2000
4000
6000
8000
10000
12000
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

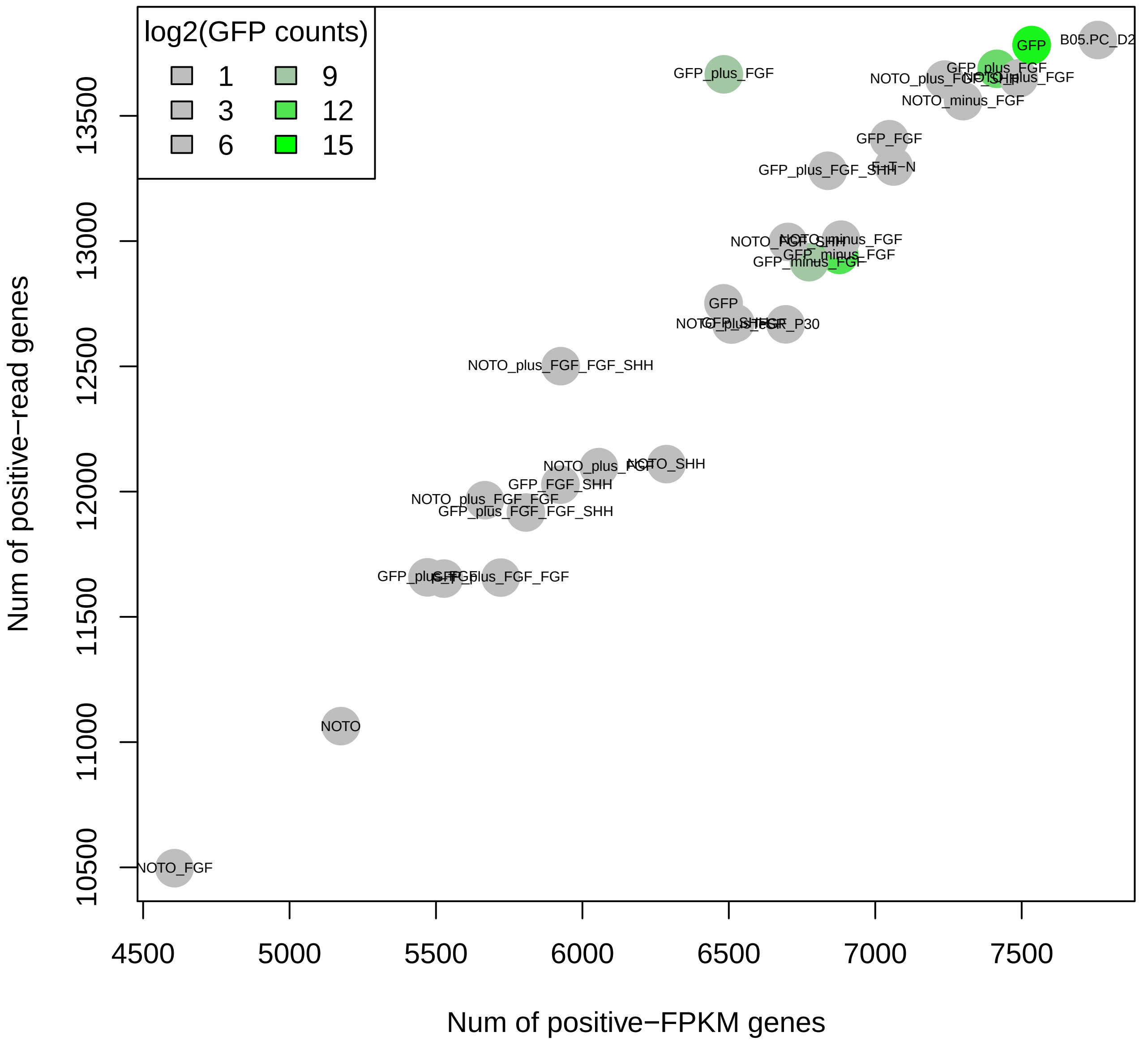

number of raw reads per sample,
before or after alignmented to human refseq
aligned to HG38 refseq
not aligned
number of reads per sample
0
500000
1000000
2000000
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

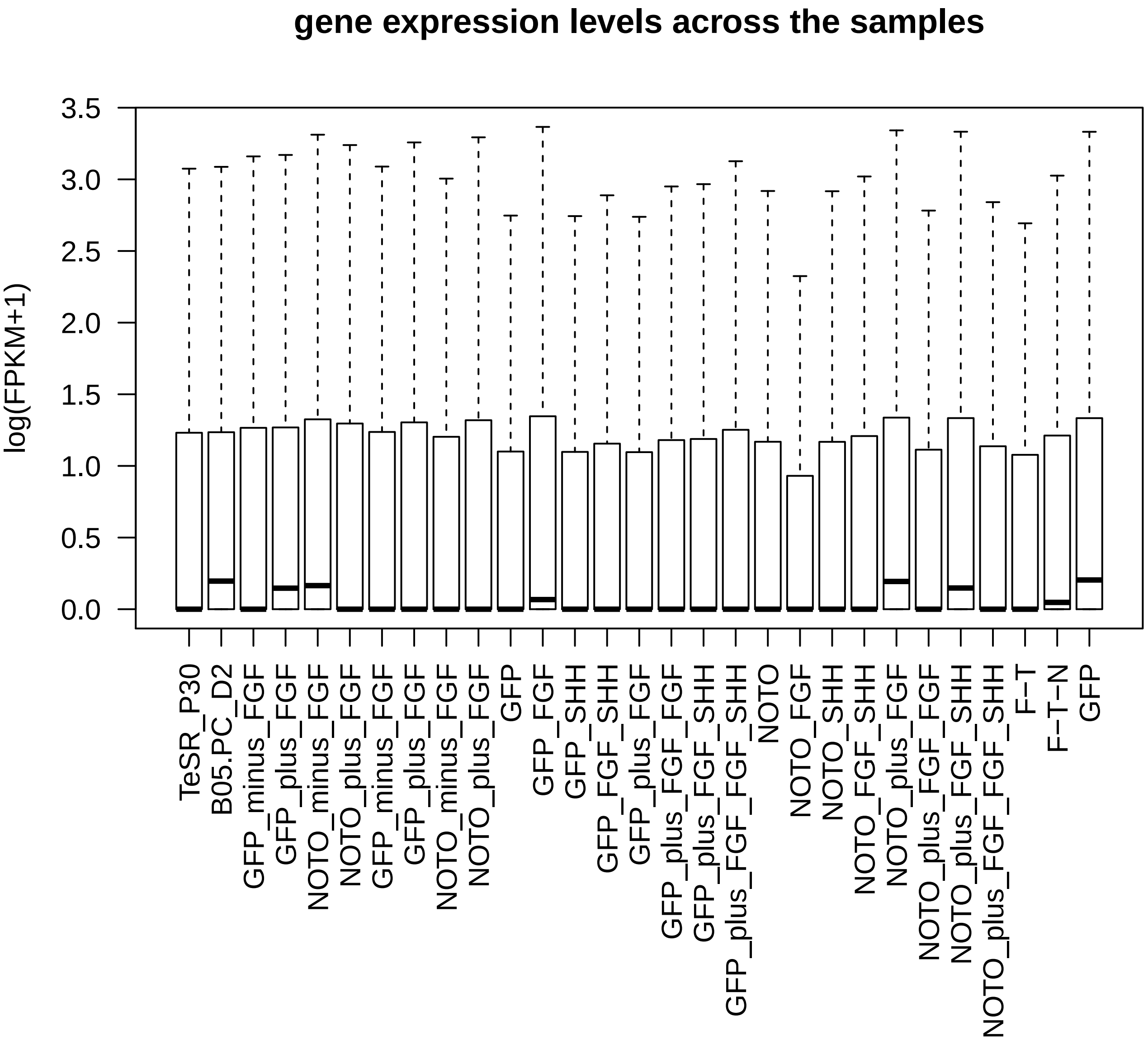

overall mapping rate
log2(GFP counts):
1
3
6
9
12
15
mapping rates (%)
0
20
40
60
80
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

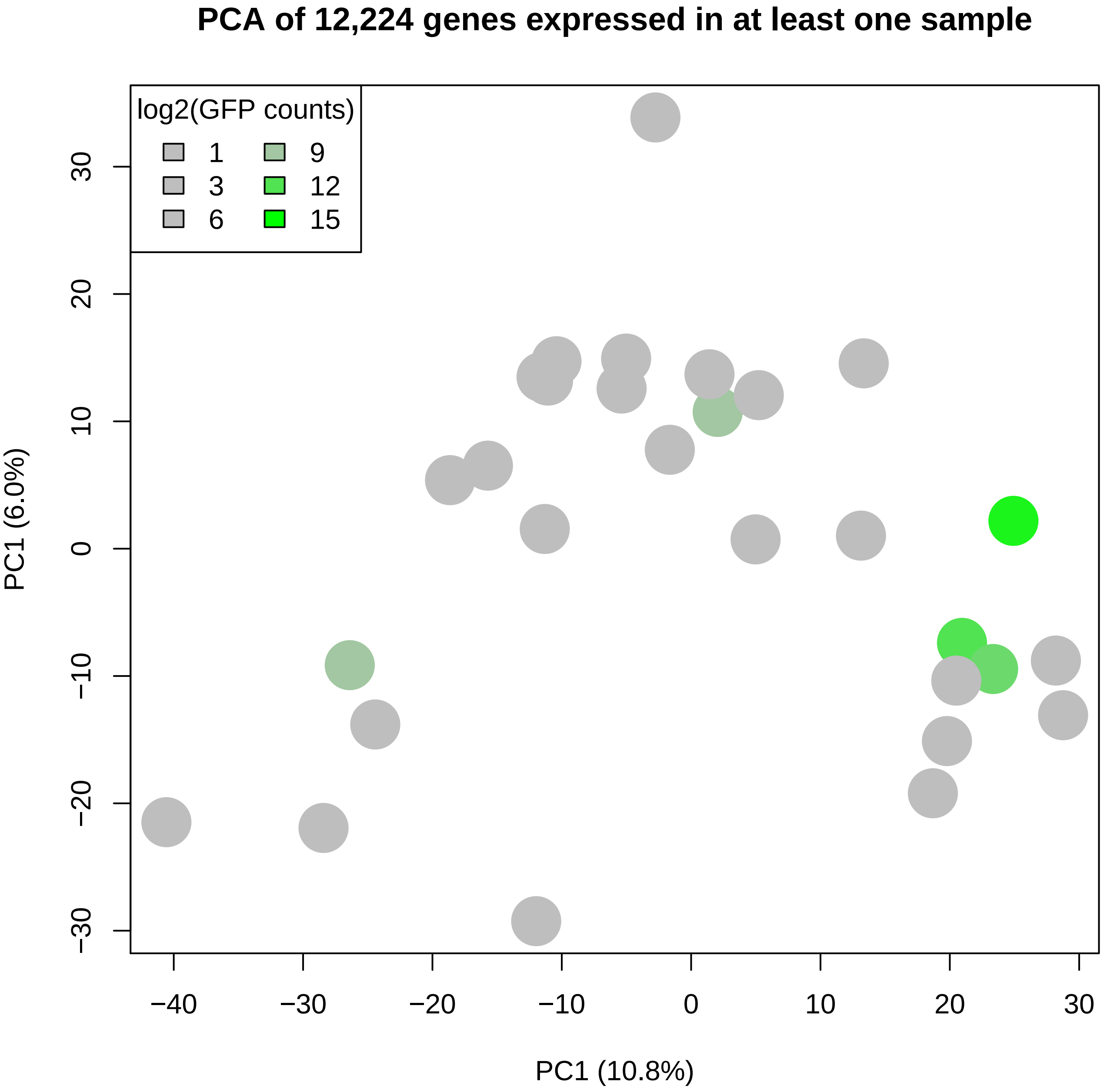

Numbers of genes detected with at least one read
log2(GFP counts)
1
3
6
9
12
15
Num of genes per sample
0
2000
4000
6000
8000
10000
12000
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP



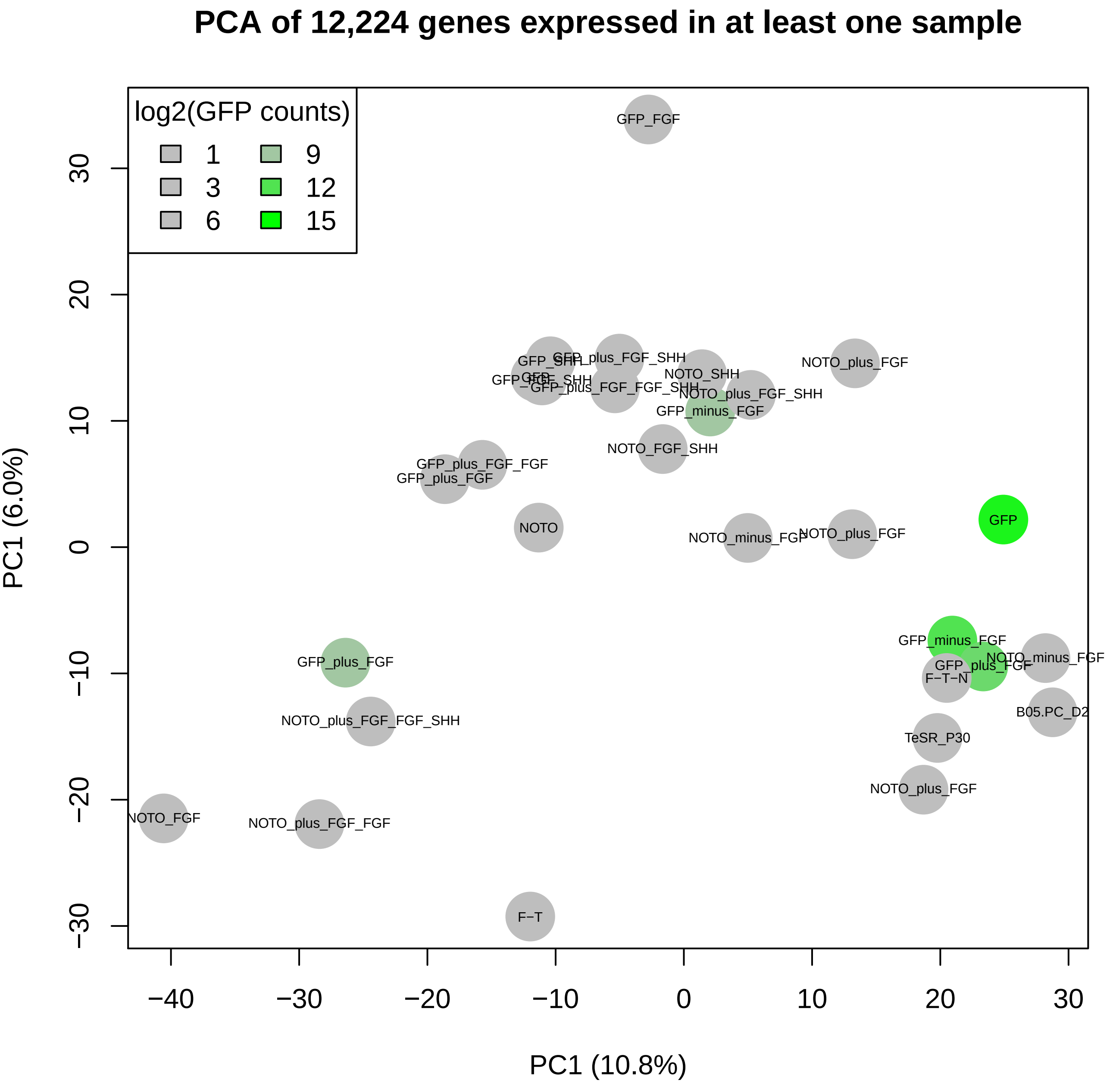
Numbers of genes detected with non−zero FPKM

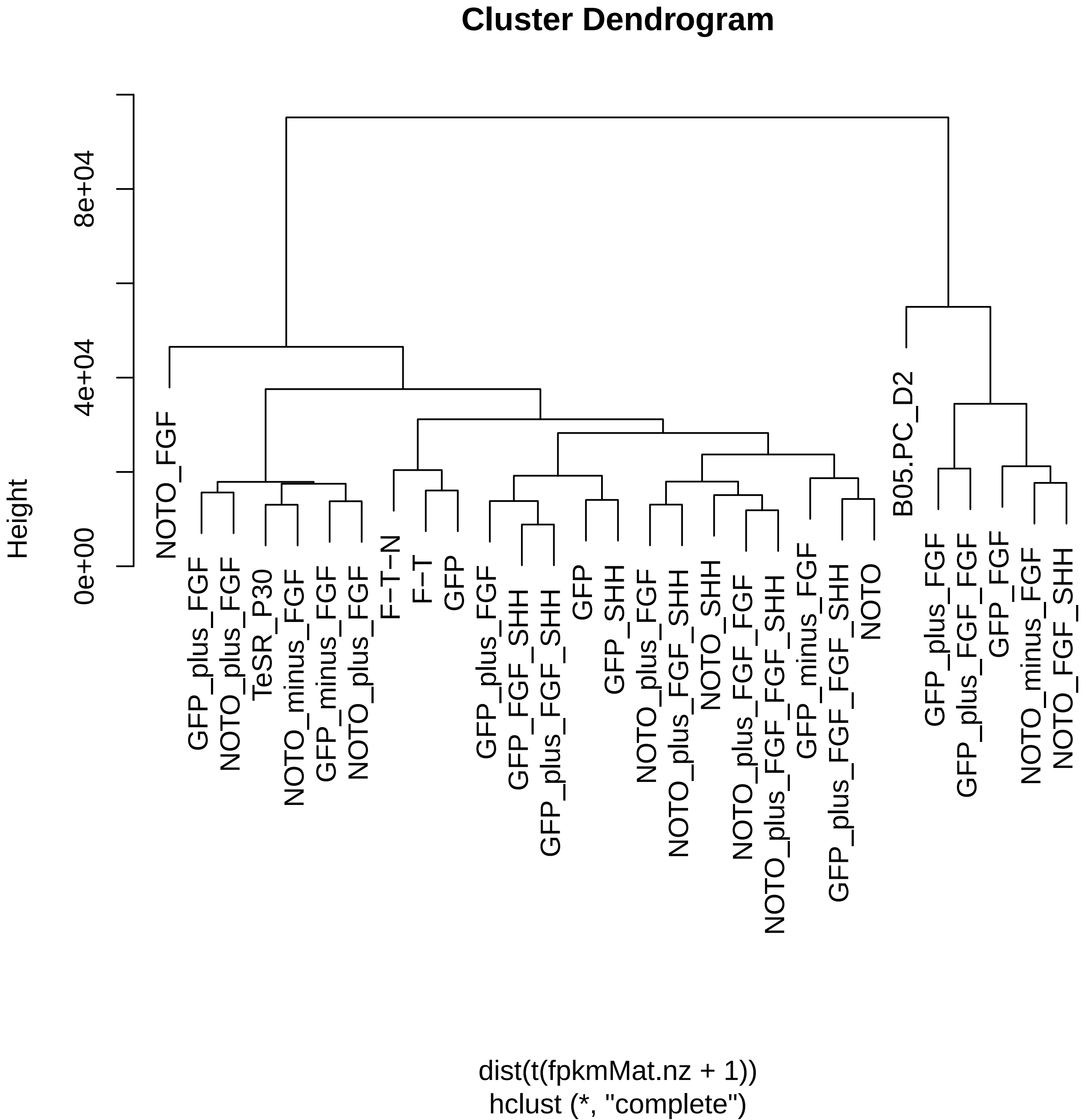

log2(GFP counts)
🟫 1
🟫 3
🟫 6
🟩 9
🟩 12
🟩 15
Num of positive−read genes
Num of positive−FPKM genes
10500
11000
11500
12000
12500
13000
13500
4500
5000
5500
6000
6500
7000
7500
GFP
B05.PC_D2
GFP_plus_FGF
GFP_plus_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF
NOTO_minus_FGF
GFP_FGF
GFP_plus_FGF_SHH
F−T−N
NOTO_FGF_SHH
NOTO_minus_FGF
GFP_minus_FGF
GFP_minus_FGF
GFP
NOTO_plus_SHH
R_P30
NOTO_plus_FGF_FGF_SHH
NOTO_plus_FGF
NOTO_SHH
GFP_FGF_SHH
NOTO_plus_FGF_FGF
GFP_plus_FGF_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
NOTO
NOTO_FGF

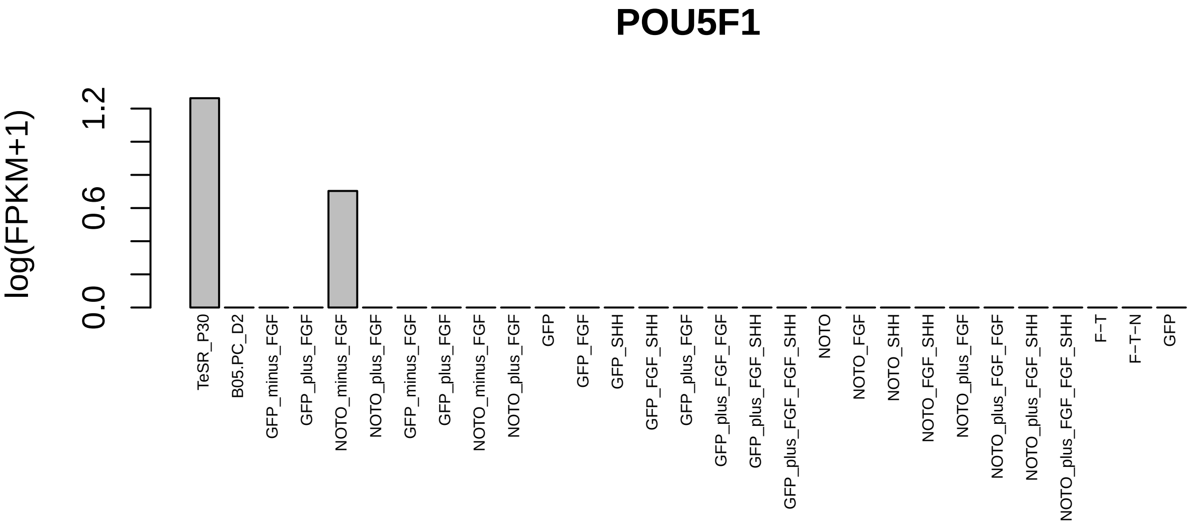

gene expression levels across the samples
log(FPKM+1)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

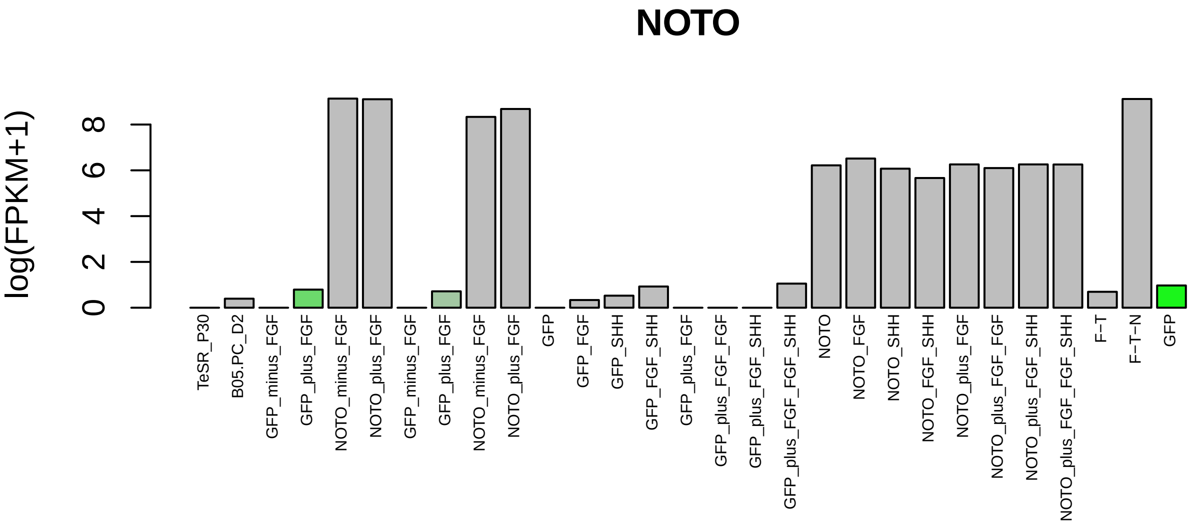


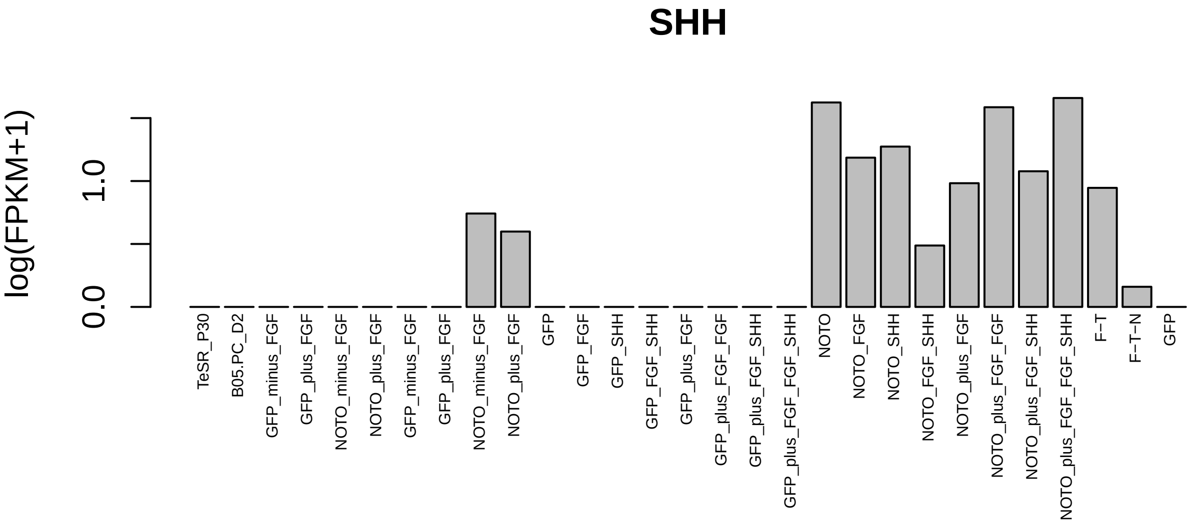
PCA of 12,224 genes expressed in at least one sample


PCA of 12,224 genes expressed in at least one sample
log2(GFP counts)
1
3
6
9
12
15
PC1 (10.8%)
PC1 (6.0%)
−40
−30
−20
−10
0
10
20
30
−30
−20
−10
0
10
20
30
GFP_FGF
GFP_SHH
GFP_plus_FGF_SHH
GFP_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO_SHH
NOTO_plus_FGF_SHH
NOTO_plus_FGF
GFP_minus_FGF
NOTO_FGF_SHH
GFP_plus_FGF_FGF
GFP_plus_FGF
NOTO
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_minus_FGF
NOTO_minus_FGF
GFP_plus_FGF
F−T−N
B05.PC_D2
TeSR_P30
NOTO_plus_FGF
GFP_plus_FGF
NOTO_plus_FGF_FGF_SHH
NOTO_FGF
NOTO_plus_FGF_FGF
F−T


Cluster Dendrogram
Height
0e+00
4e+04
8e+04
NOTO_FGF
GFP_plus_FGF
NOTO_plus_FGF
TeSR_P30
NOTO_minus_FGF
GFP_minus_FGF
NOTO_plus_FGF
F−T−N
F−T
GFP
GFP_plus_FGF
GFP_FGF_SHH
GFP_plus_FGF_SHH
GFP
GFP_SHH
NOTO_plus_FGF
NOTO_plus_FGF_SHH
NOTO_SHH
NOTO_plus_FGF_FGF
NOTO_plus_FGF_FGF_SHH
GFP_minus_FGF
GFP_plus_FGF_FGF_SHH
NOTO
B05.PC_D2
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_FGF
NOTO_minus_FGF
NOTO_FGF_SHH
dist(t(fpkmMat.nz + 1))
hclust (*, "complete")

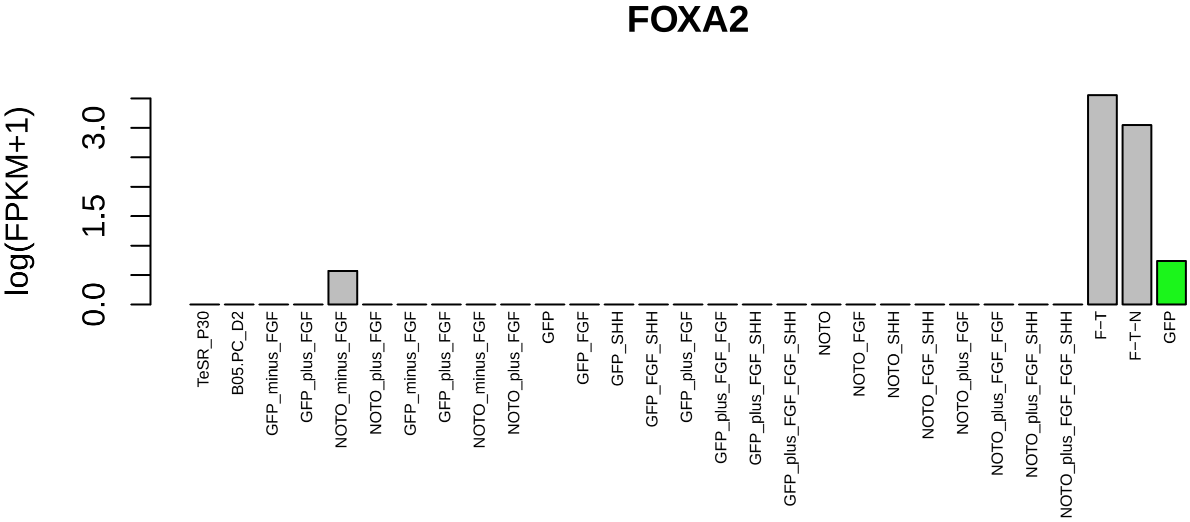

POU5F1
log(FPKM+1)
0.0
0.6
1.2
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP


NOTO
log(FPKM+1)
0
2
4
6
8
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP



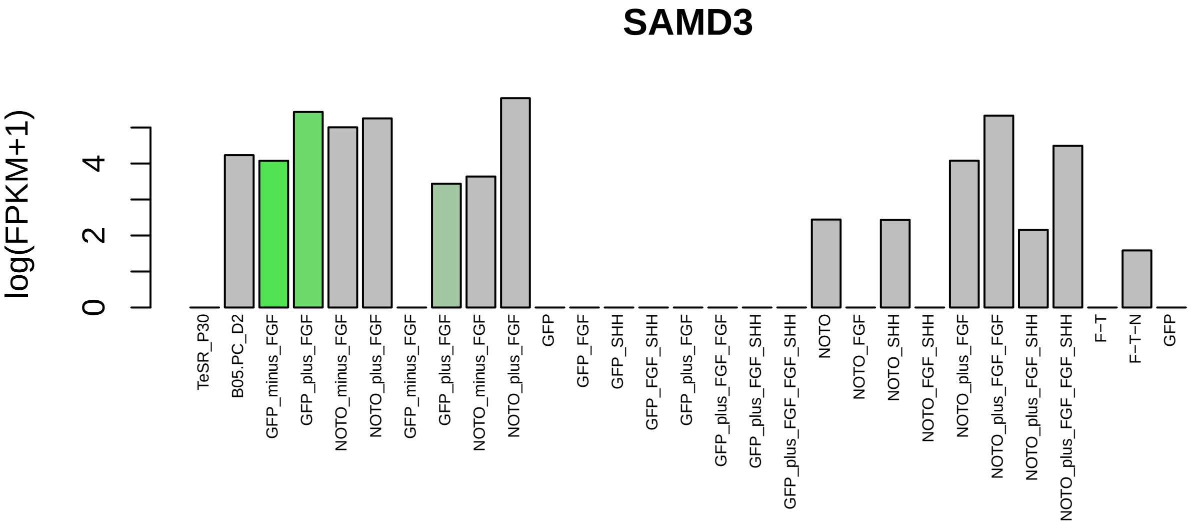
SHH

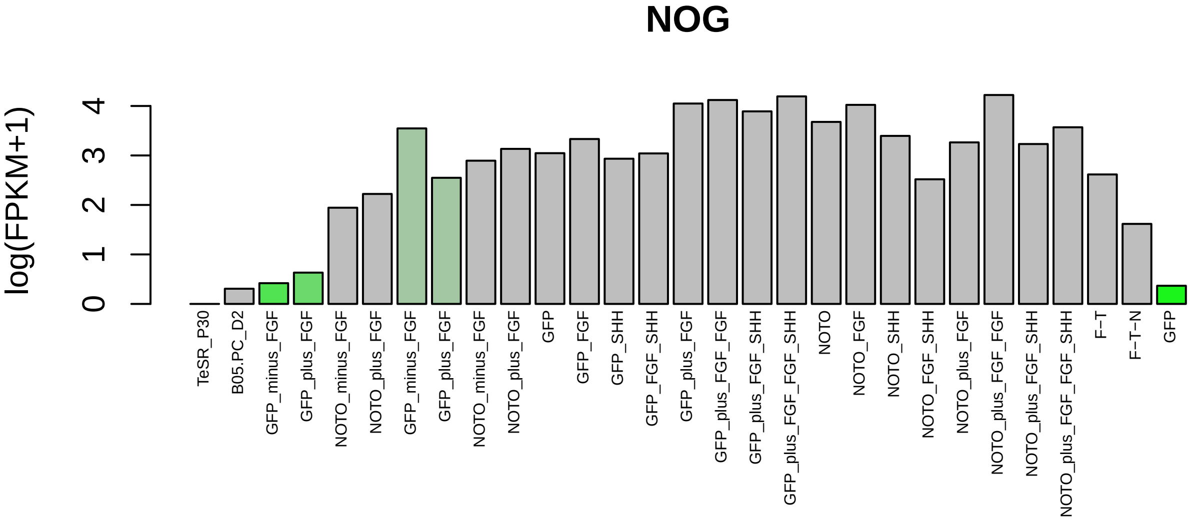
log(FPKM+1)
0.0
1.0
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

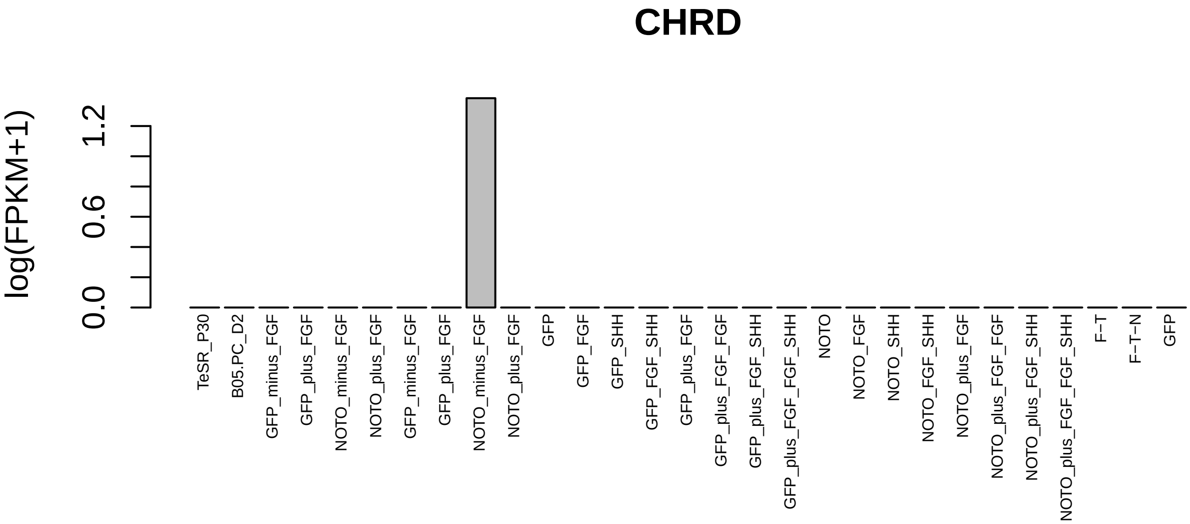


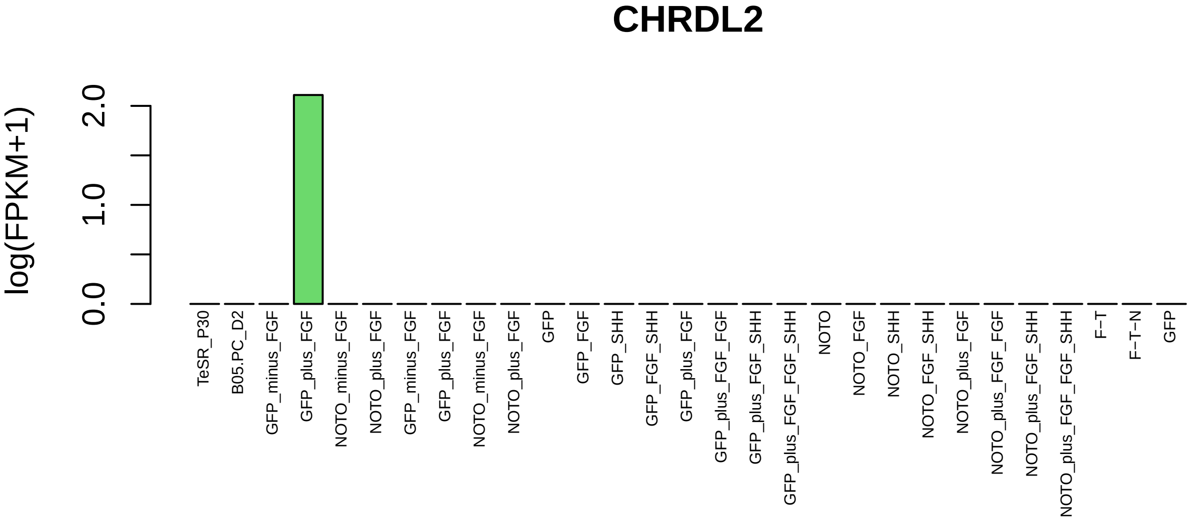
FOXA2

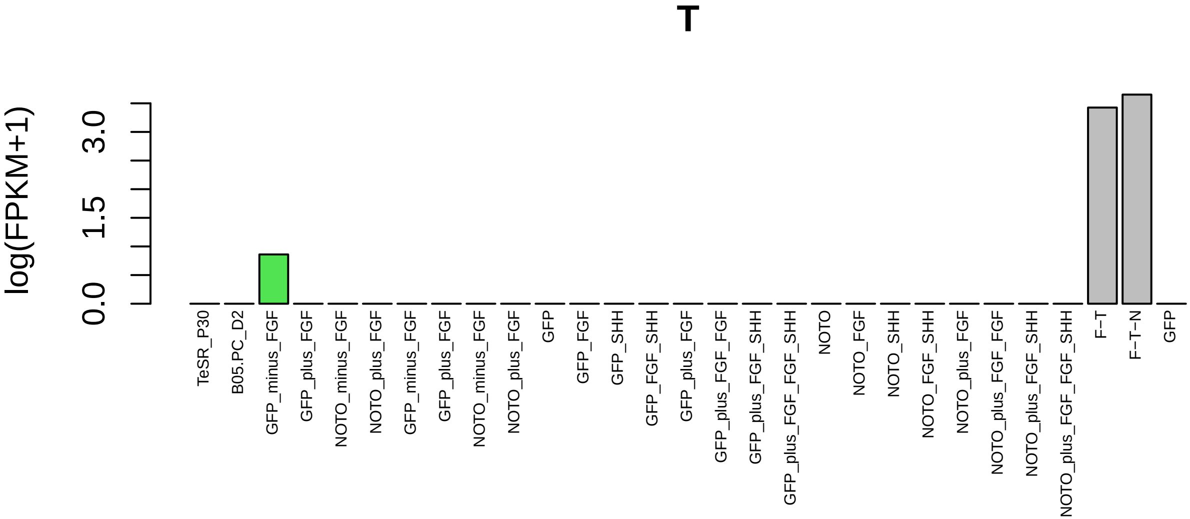
log(FPKM+1)
0.0
1.5
3.0
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

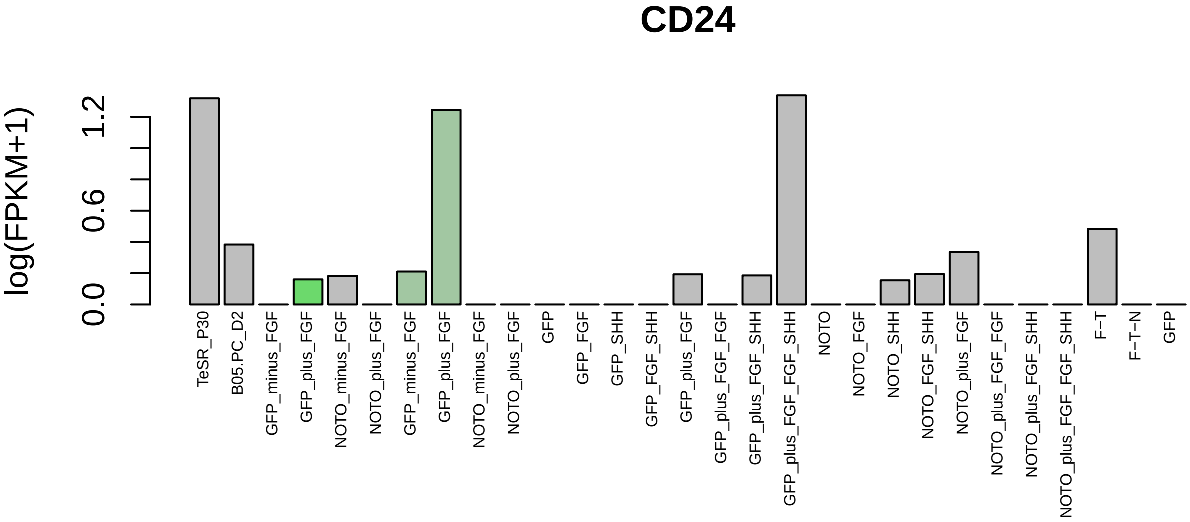

SAMD3
log(FPKM+1)
0
2
4
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

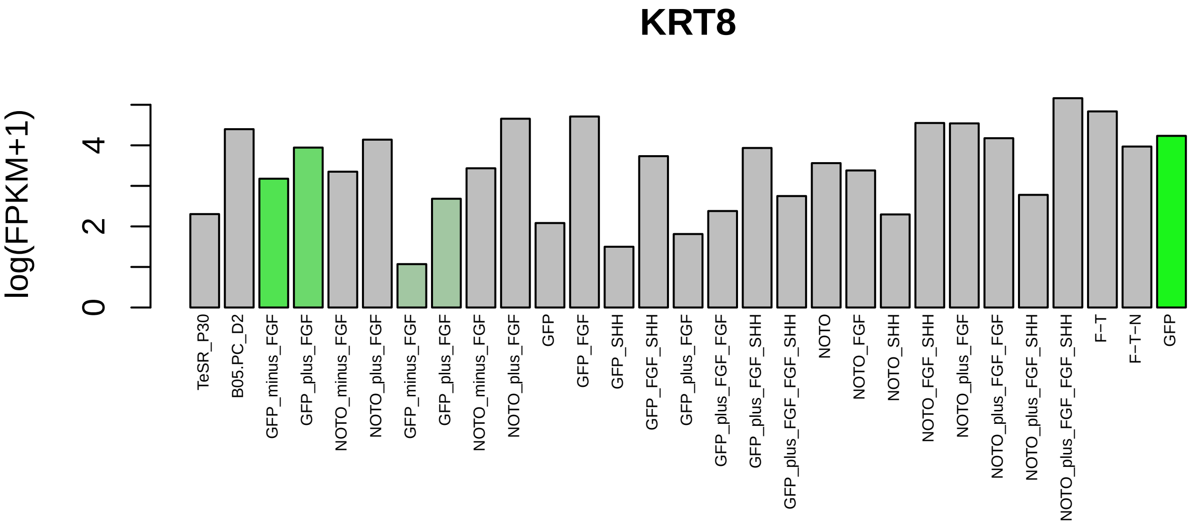

NOG
log(FPKM+1)
0
1
2
3
4
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP


CHRD
log(FPKM+1)
0.0
0.6
1.2
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

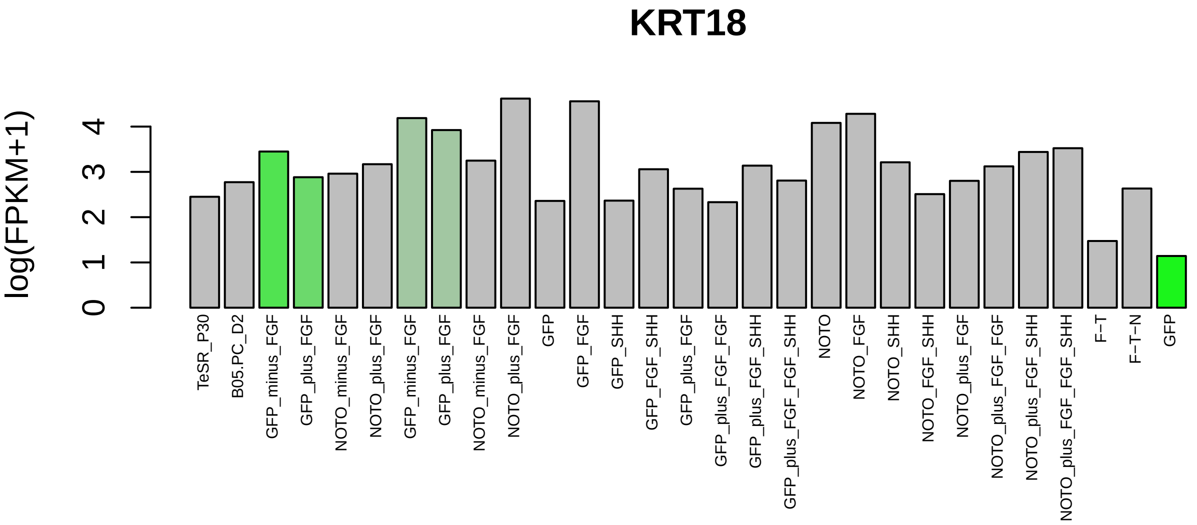

CHRDL2
log(FPKM+1)
0.0
1.0
2.0
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP


T
log(FPKM+1)
0.0
1.5
3.0
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

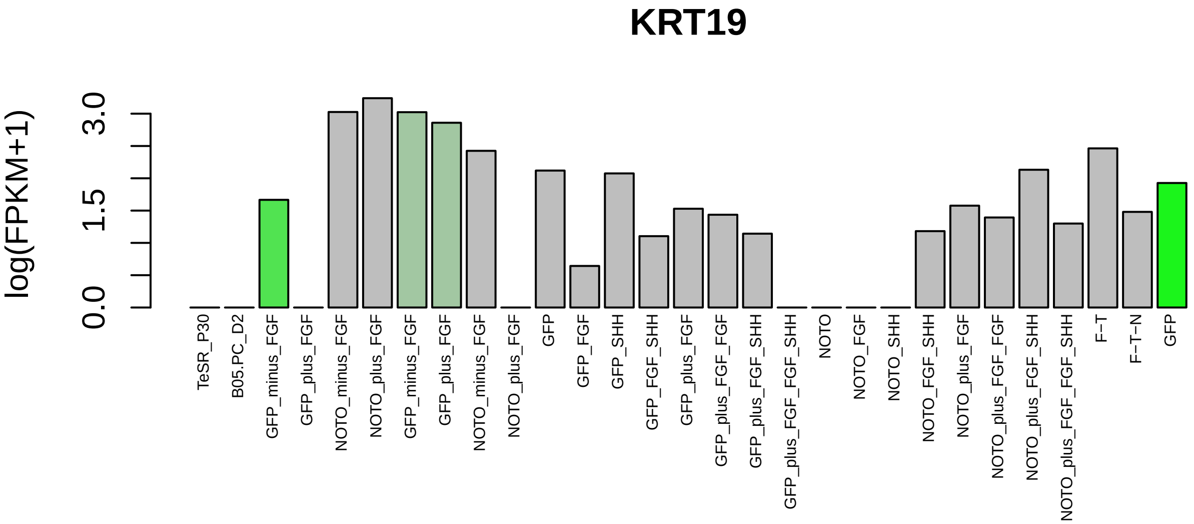

CD24
log(FPKM+1)
0.0
0.6
1.2
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP

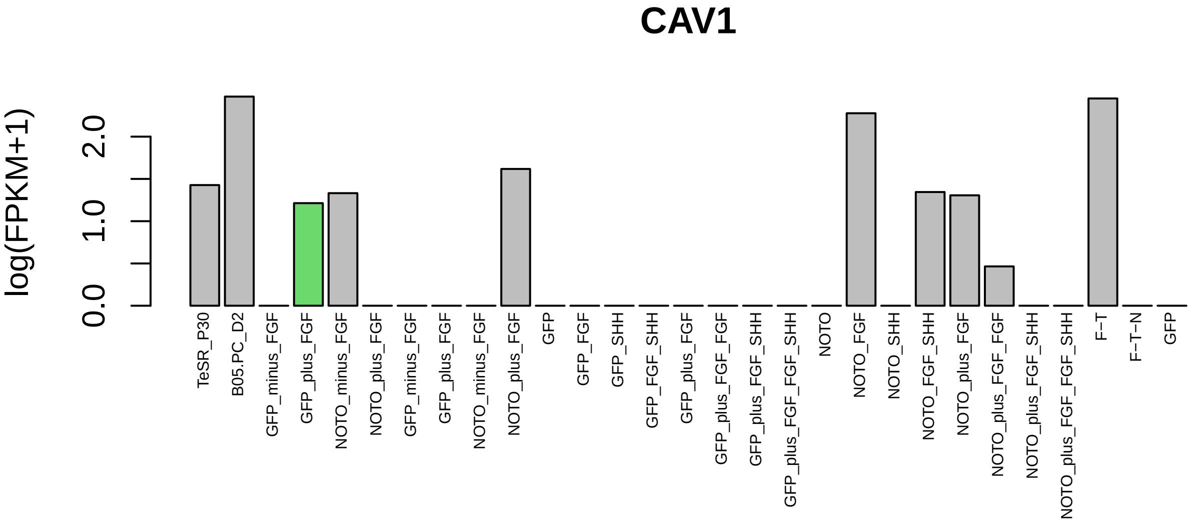

KRT8

log(FPKM+1)
0
2
4
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP


KRT18

log(FPKM+1)
0
1
2
3
4
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP


KRT19
log(FPKM+1)
0.0
1.5
3.0
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
NOTO_plus_FGF_FGF
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP


CAV1
log(FPKM+1)
0.0
1.0
2.0
TeSR_P30
B05.PC_D2
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP_minus_FGF
GFP_plus_FGF
NOTO_minus_FGF
NOTO_plus_FGF
GFP
GFP_FGF
GFP_SHH
GFP_FGF_SHH
GFP_plus_FGF
GFP_plus_FGF_FGF
GFP_plus_FGF_SHH
GFP_plus_FGF_FGF_SHH
NOTO
NOTO_FGF
NOTO_SHH
NOTO_FGF_SHH
NOTO_plus_FGF
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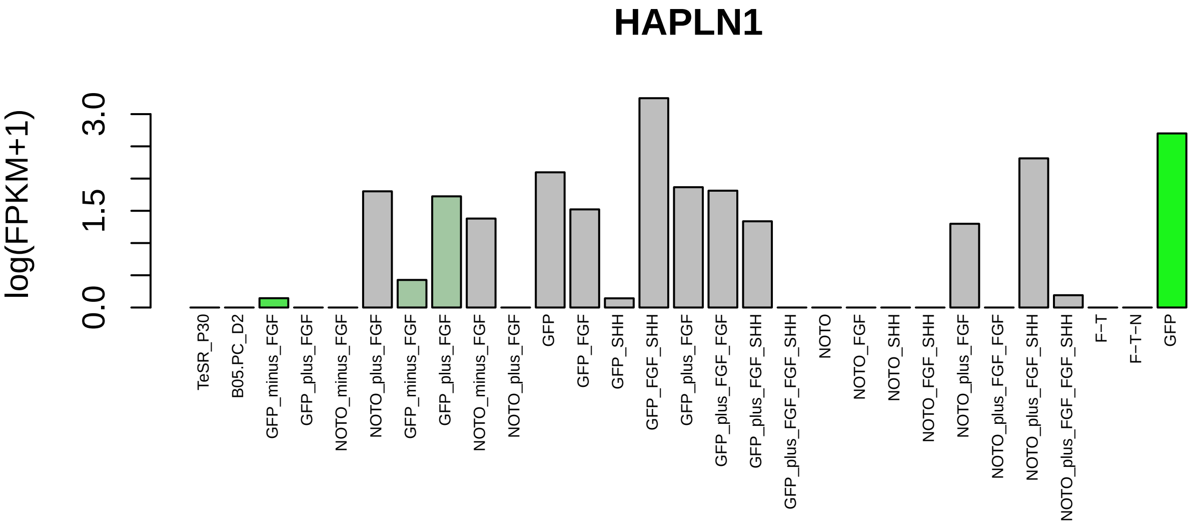
NOTO_plus_FGF_SHH
NOTO_plus_FGF_FGF_SHH
F−T
F−T−N
GFP



Analysed by Peikai on: Sat May 09 23:32:55 2020