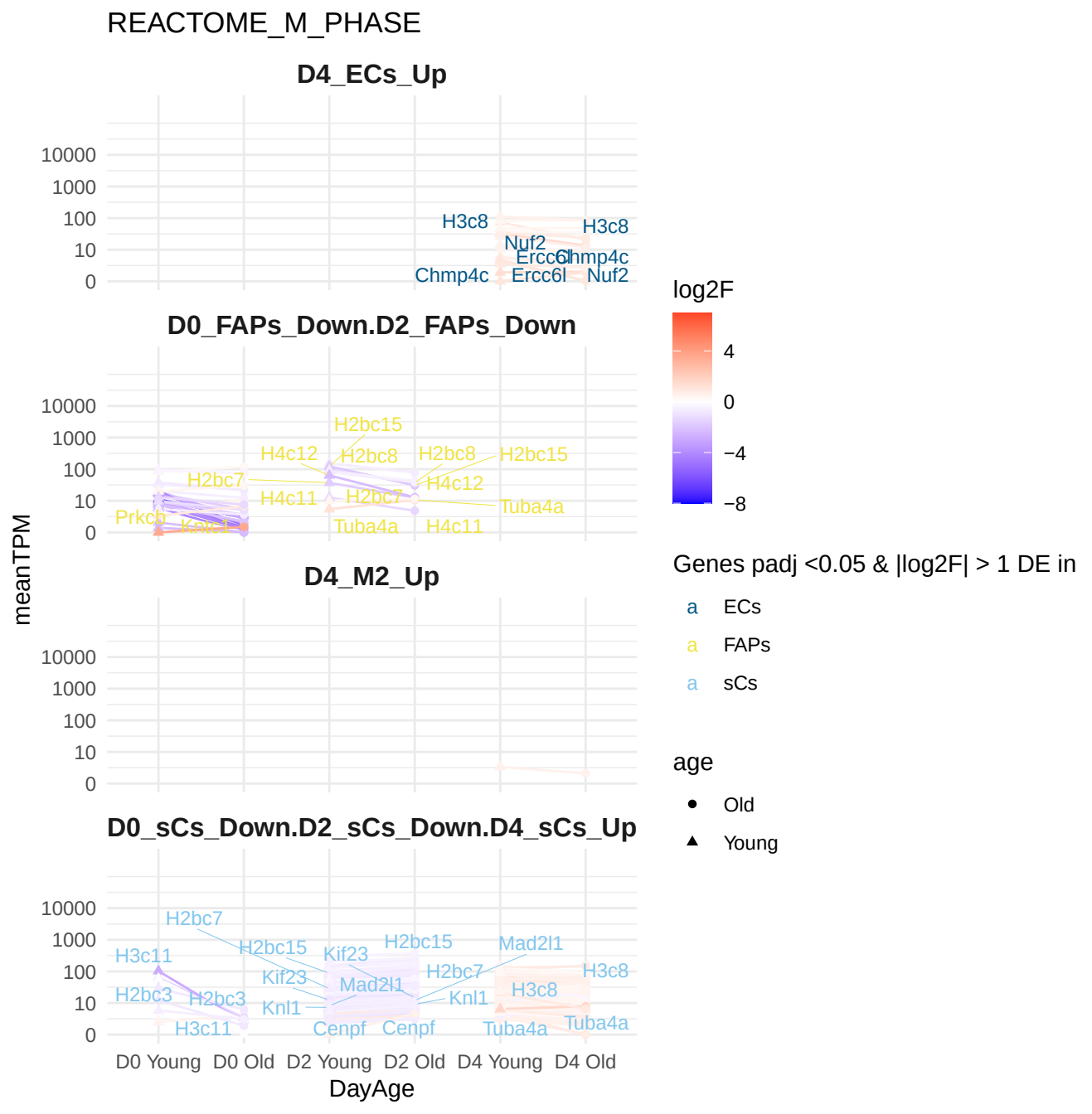
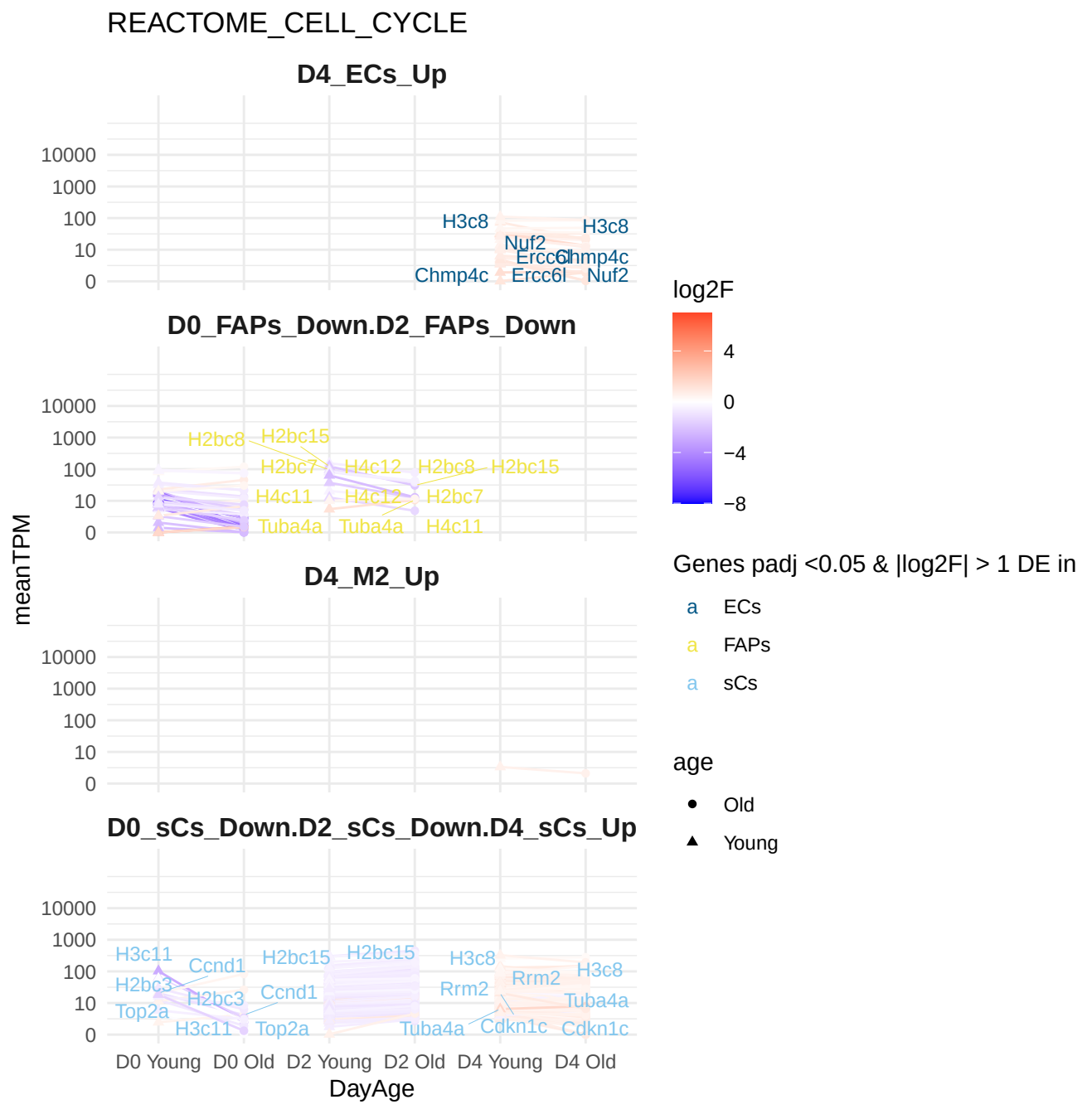
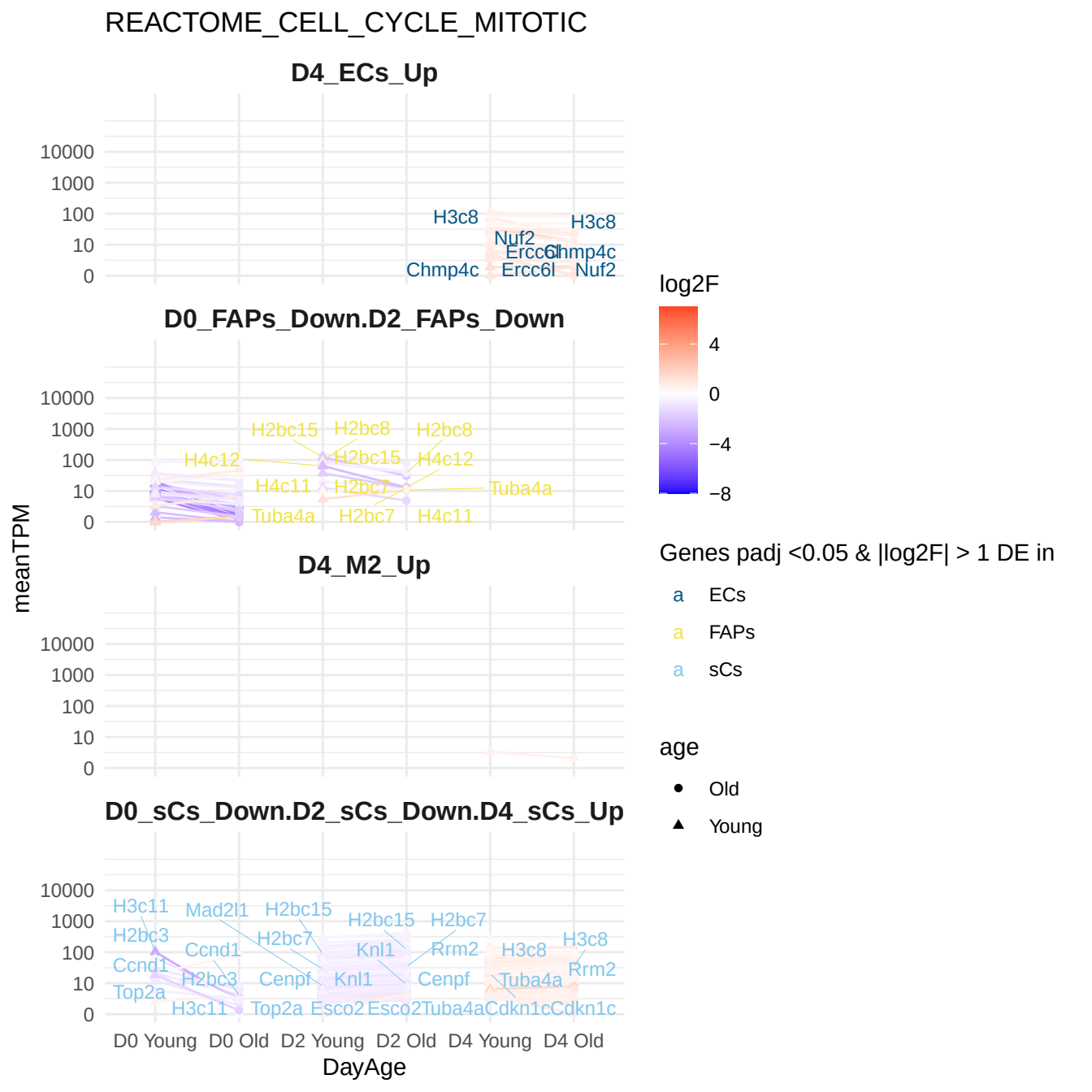
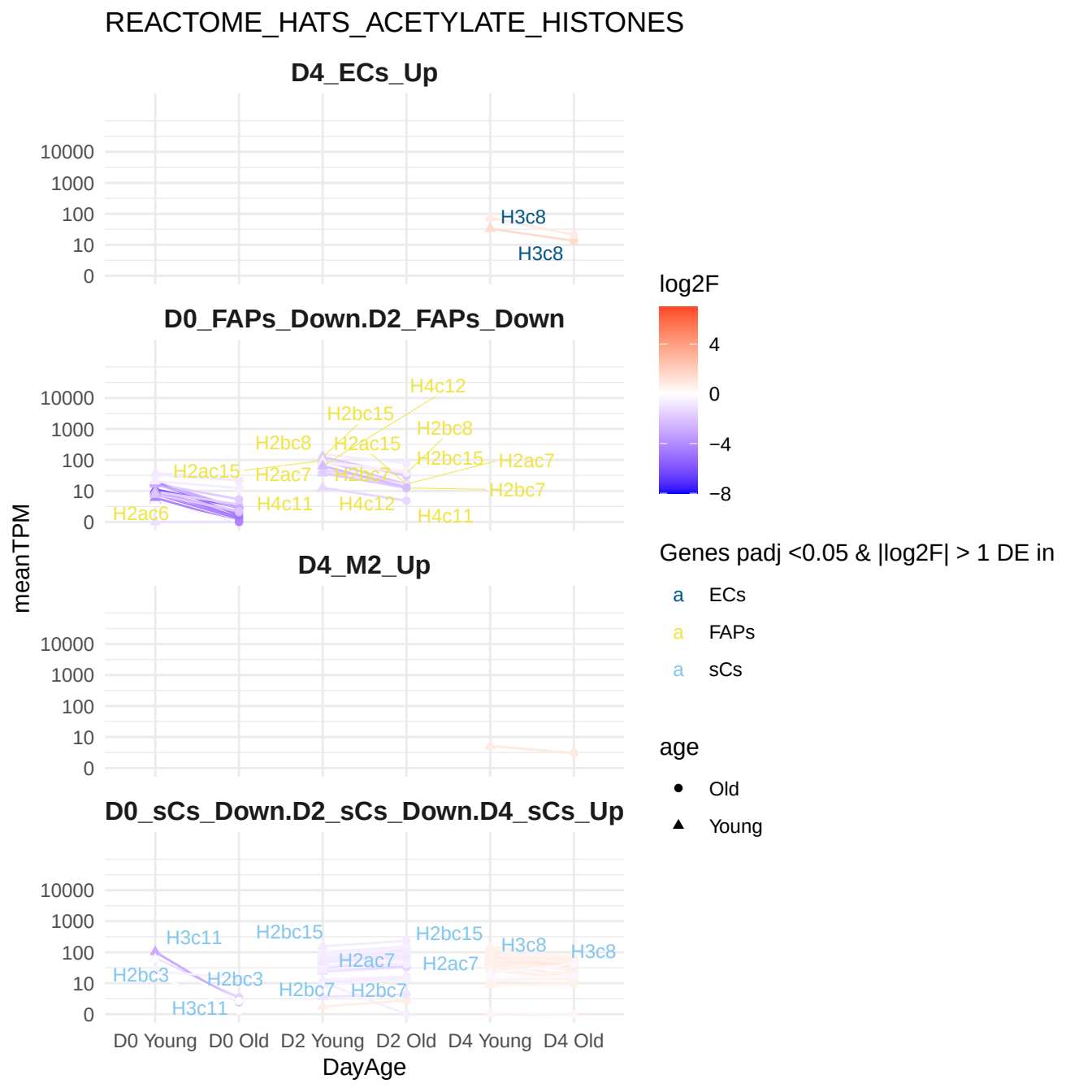
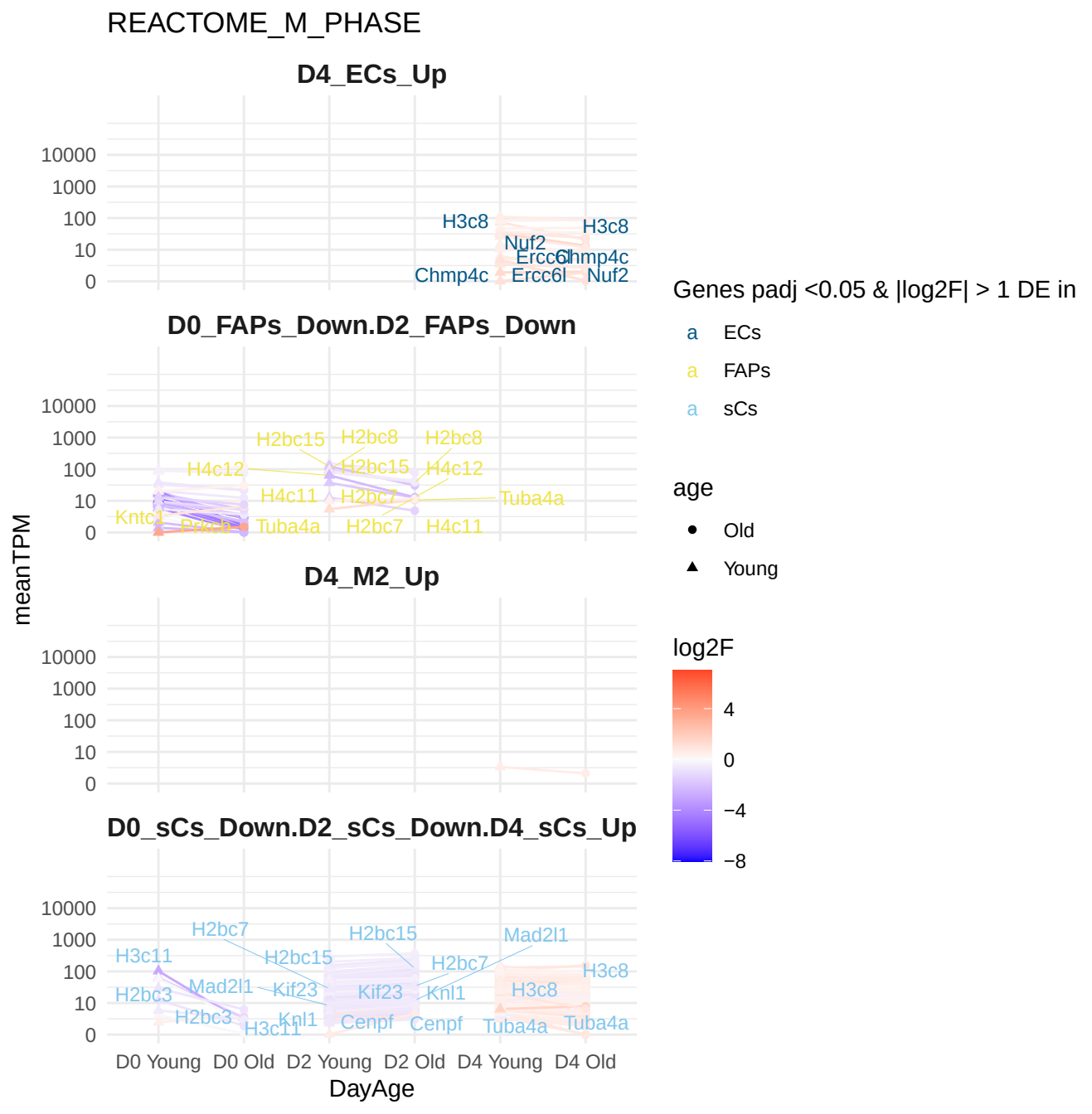
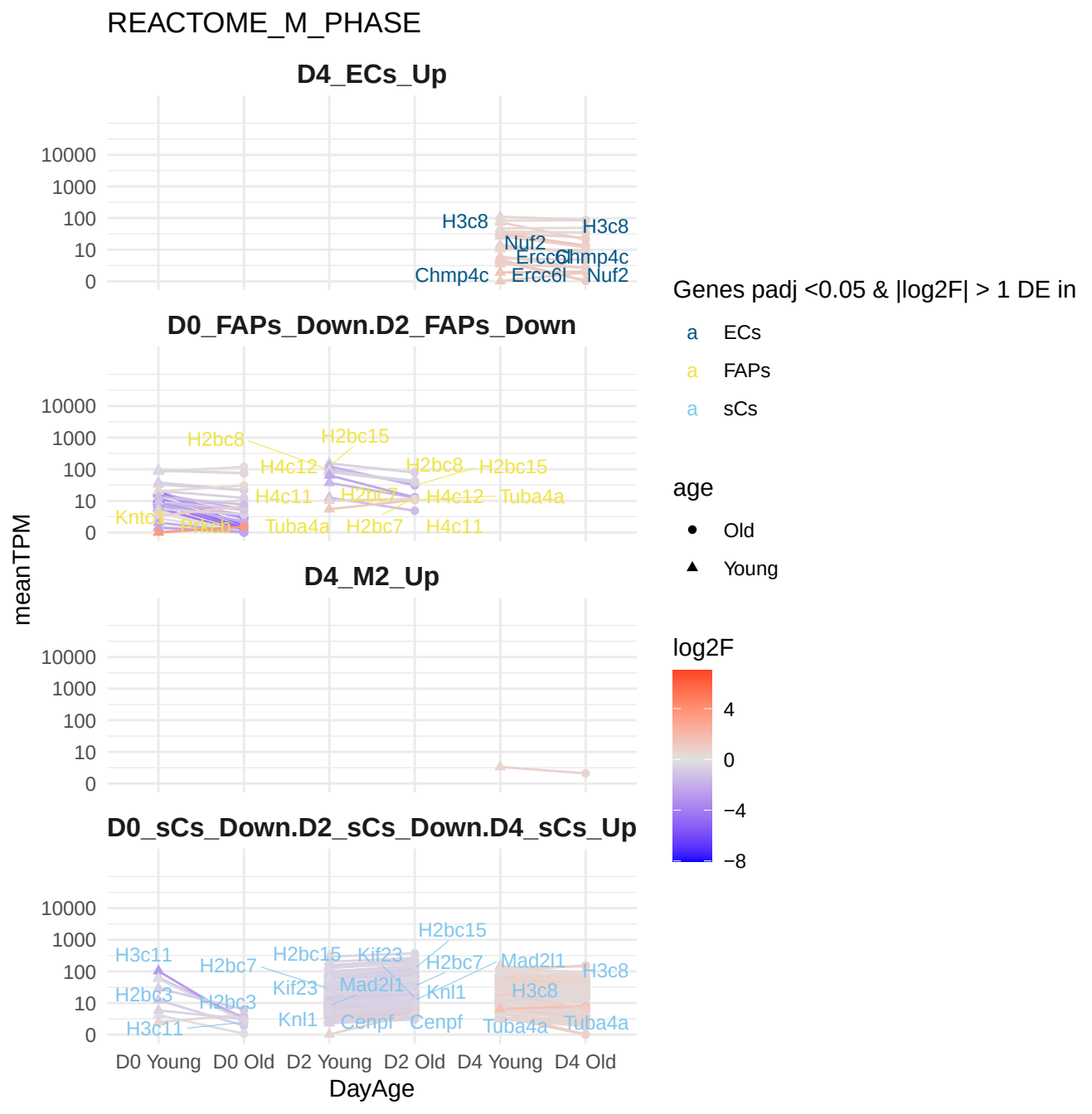

REACTOME_M_PHASE
D4_ECs_Up
D0_FAPs_Down.D2_FAPs_Down
D4_M2_Up
D0_sCs_Down.D2_sCs_Down.D4_sCs_Up
meanTPM
10000
1000
100
10
0
H3c8
Nuf2
Ercc6l
Chmp4c
H2bc15
H4c12
H2bc8
H2bc7
H4c11
Tuba4a
Prkcb
Knl1
H3c11
Kif23
Mad2l1
Cenpf
D0 Young
D0 Old
D2 Young
D2 Old
D4 Young
D4 Old
DayAge
log2F
4
0
−4
−8
Genes padj <0.05 & |log2F| > 1 DE in
a ECs
a FAPs
a sCs
age
Old
Young

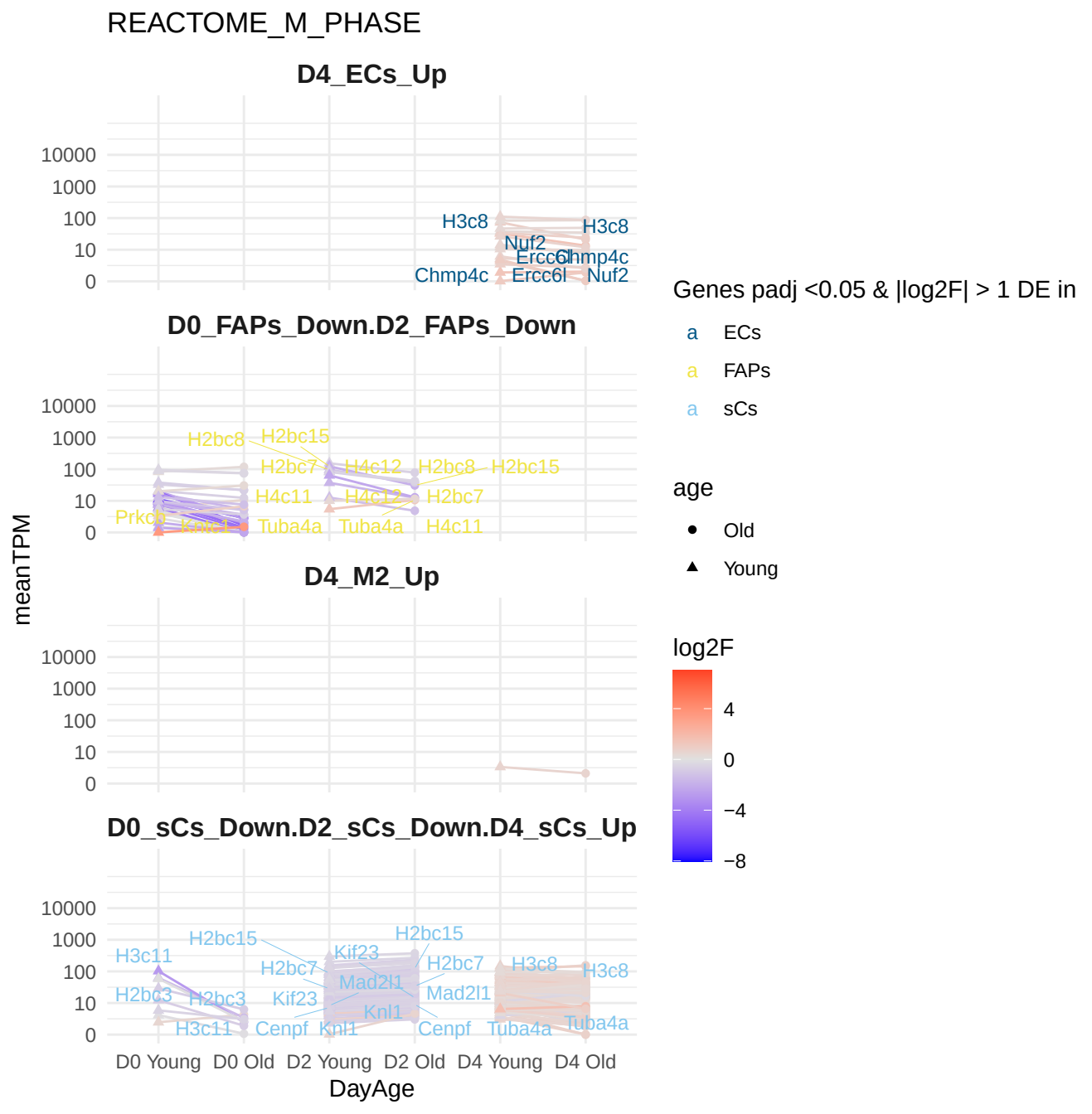

REACTOME_CELL_CYCLE
D4_ECs_Up
D0_FAPs_Down.D2_FAPs_Down
D4_M2_Up
D0_sCs_Down.D2_sCs_Down.D4_sCs_Up
meanTPM
10000
1000
100
10
0
H3c8
Nuf2
Ercc6l
Chmp4c
H2bc8
H2bc15
H2bc7
H4c12
H4c11
Tuba4a
H3c11
Ccnd1
H2bc3
Top2a
Rrm2
Cdkn1c
D0 Young
D0 Old
D2 Young
D2 Old
D4 Young
D4 Old
DayAge
log2F
4
0
−4
−8
Genes padj <0.05 & |log2F| > 1 DE in
a ECs
a FAPs
a sCs
age
Old
Young

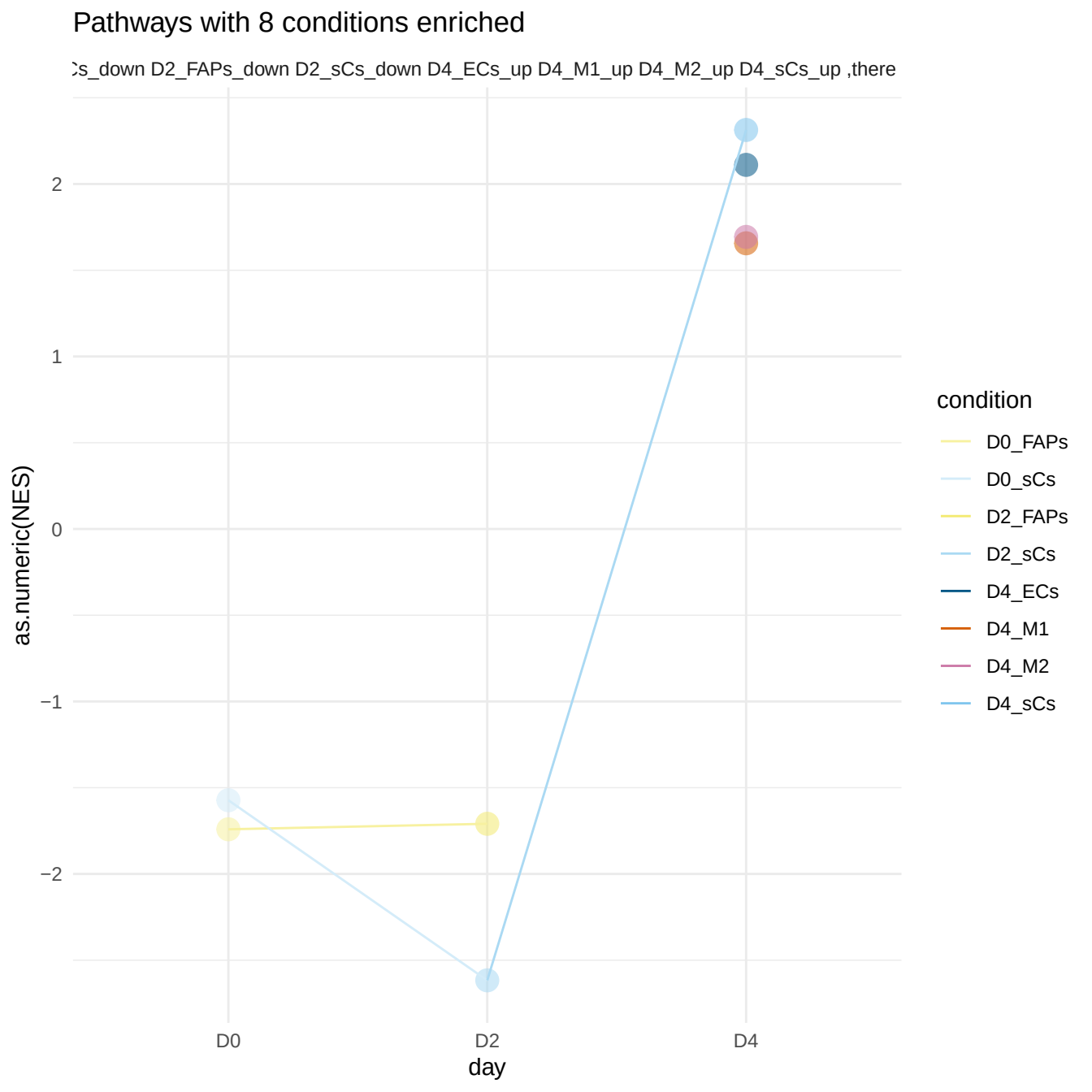

REACTOME_CELL_CYCLE_MITOTIC
D4_ECs_Up
D0_FAPs_Down.D2_FAPs_Down
D4_M2_Up
D0_sCs_Down.D2_sCs_Down.D4_sCs_Up
meanTPM
10000
1000
100
10
0
H3c8
Nuf2
Ercc6l
Chmp4c
H2bc15
H2bc8
H4c12
H4c11
H2bc7
Tuba4a
H3c11
Mad2l1
H2bc3
Ccnd1
Top2a
Cenpf
Knl1
Rrm2
Esco2
Cdkn1c
D0 Young
D0 Old
D2 Young
D2 Old
D4 Young
D4 Old
DayAge
log2F
4
0
−4
−8
Genes padj <0.05 & |log2F| > 1 DE in
a ECs
a FAPs
a sCs
age
Old
Young

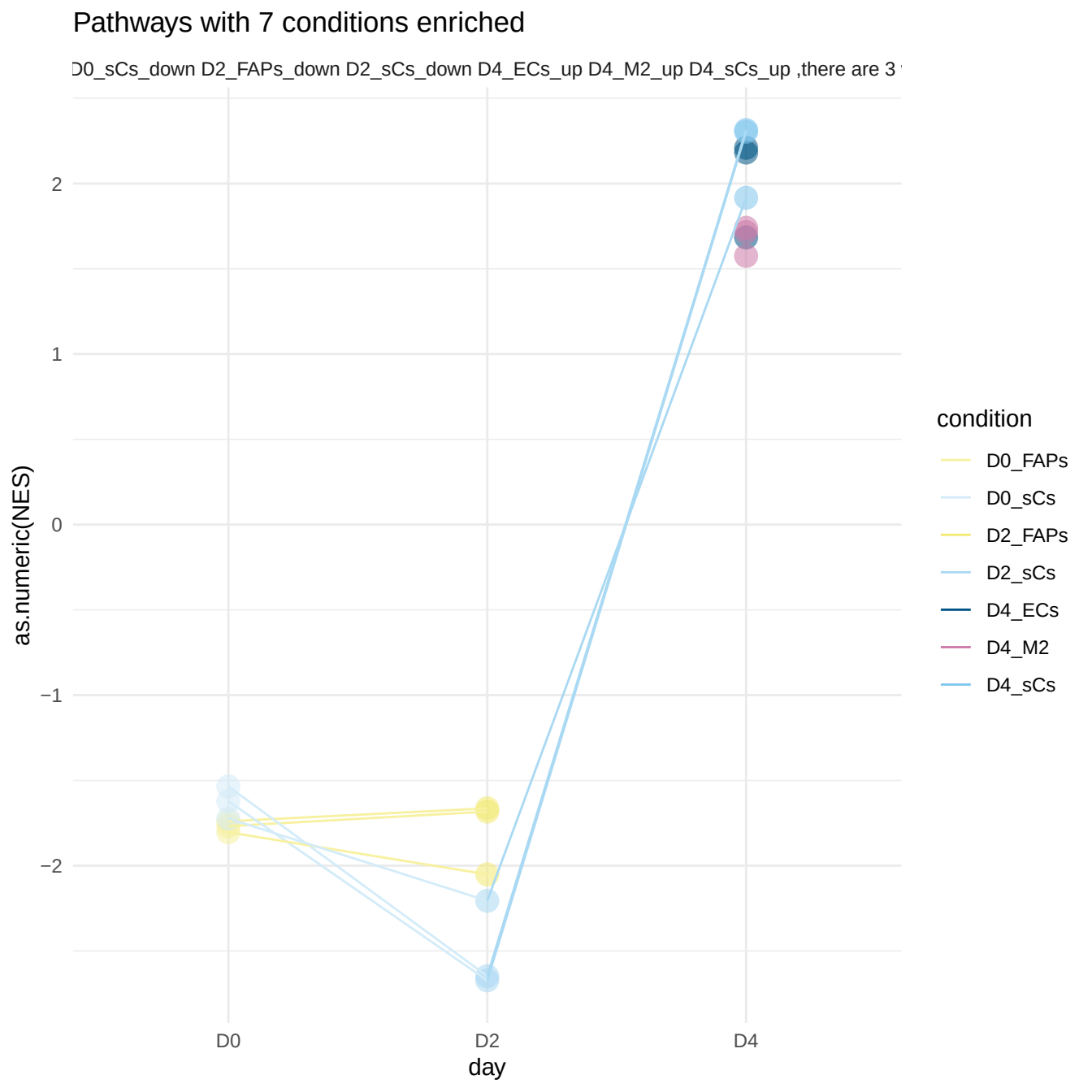

REACTOME_HATS_ACETYLATE_HISTONES
D4_ECs_Up
D0_FAPs_Down.D2_FAPs_Down
D4_M2_Up
D0_sCs_Down.D2_sCs_Down.D4_sCs_Up
meanTPM
10000
1000
100
10
0
H3c8
H3c8
H4c12
H2bc15
H2bc8
H2bc8
H2ac15
H2bc15
H2ac7
H2ac15
H2ac7
H2bc7
H2bc7
H4c11
H4c12
H4c11
H2ac6
H3c11
H2bc15
H2bc15
H3c8
H3c8
H2ac7
H2ac7
H2bc3
H2bc3
H2bc7
H2bc7
H3c11
D0 Young
D0 Old
D2 Young
D2 Old
D4 Young
D4 Old
DayAge
log2F
4
0
−4
−8
Genes padj <0.05 & |log2F| > 1 DE in
a ECs
a FAPs
a sCs
age
Old
Young

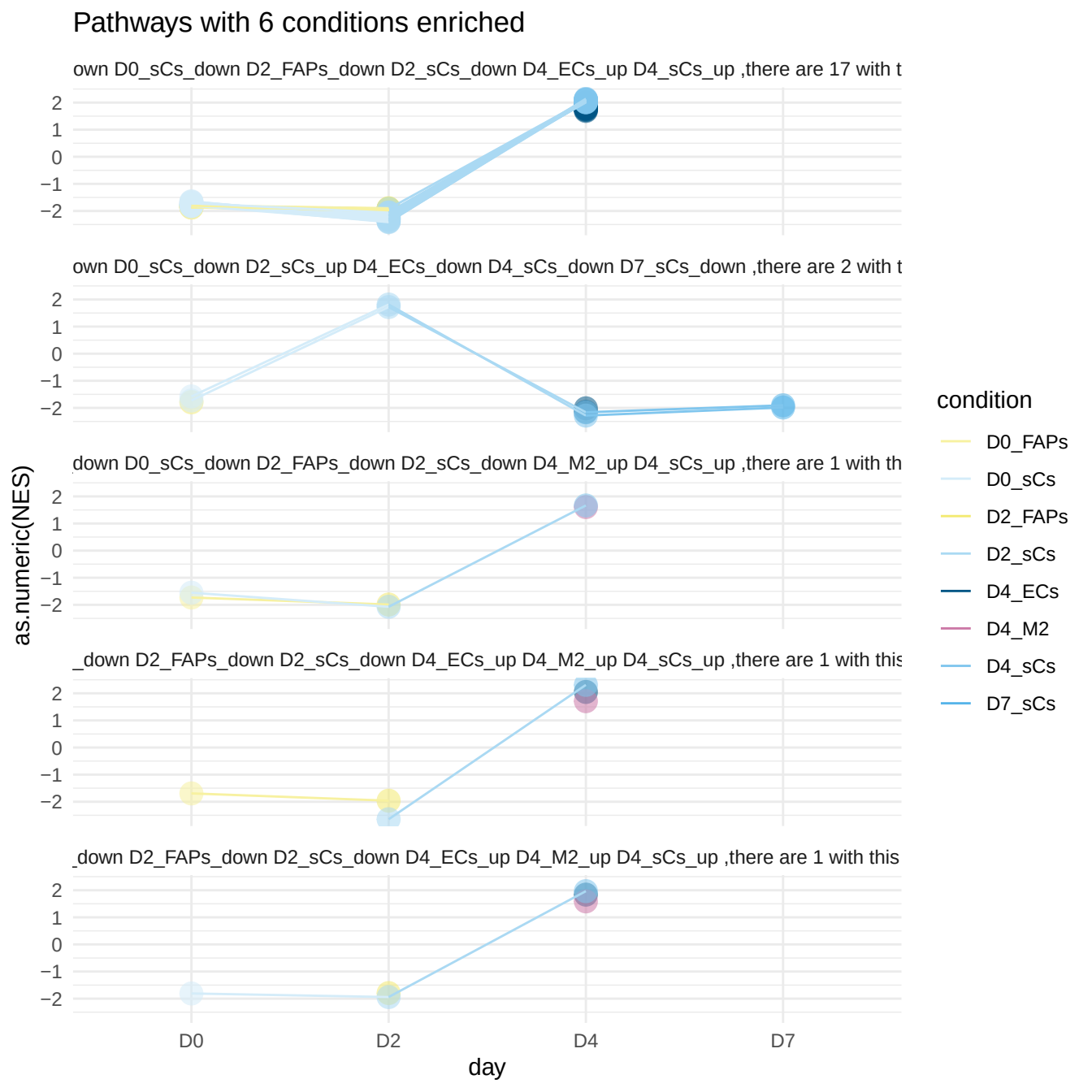

REACTOME_M_PHASE
D4_ECs_Up
D0_FAPs_Down.D2_FAPs_Down
D4_M2_Up
D0_sCs_Down.D2_sCs_Down.D4_sCs_Up
meanTPM
10000
1000
100
10
0
H3c8
Nuf2
Ercc6l
Chmp4c
H2bc15
H2bc8
H4c12
H4c11
H2bc7
Tuba4a
Kntc1
Prkcb
H3c11
Mad2l1
Kif23
Knl1
Cenpf
D0 Young
D0 Old
D2 Young
D2 Old
D4 Young
D4 Old
DayAge
Genes padj <0.05 & |log2F| > 1 DE in
a ECs
a FAPs
a sCs
age
Old
Young
log2F
4
0
−4
−8

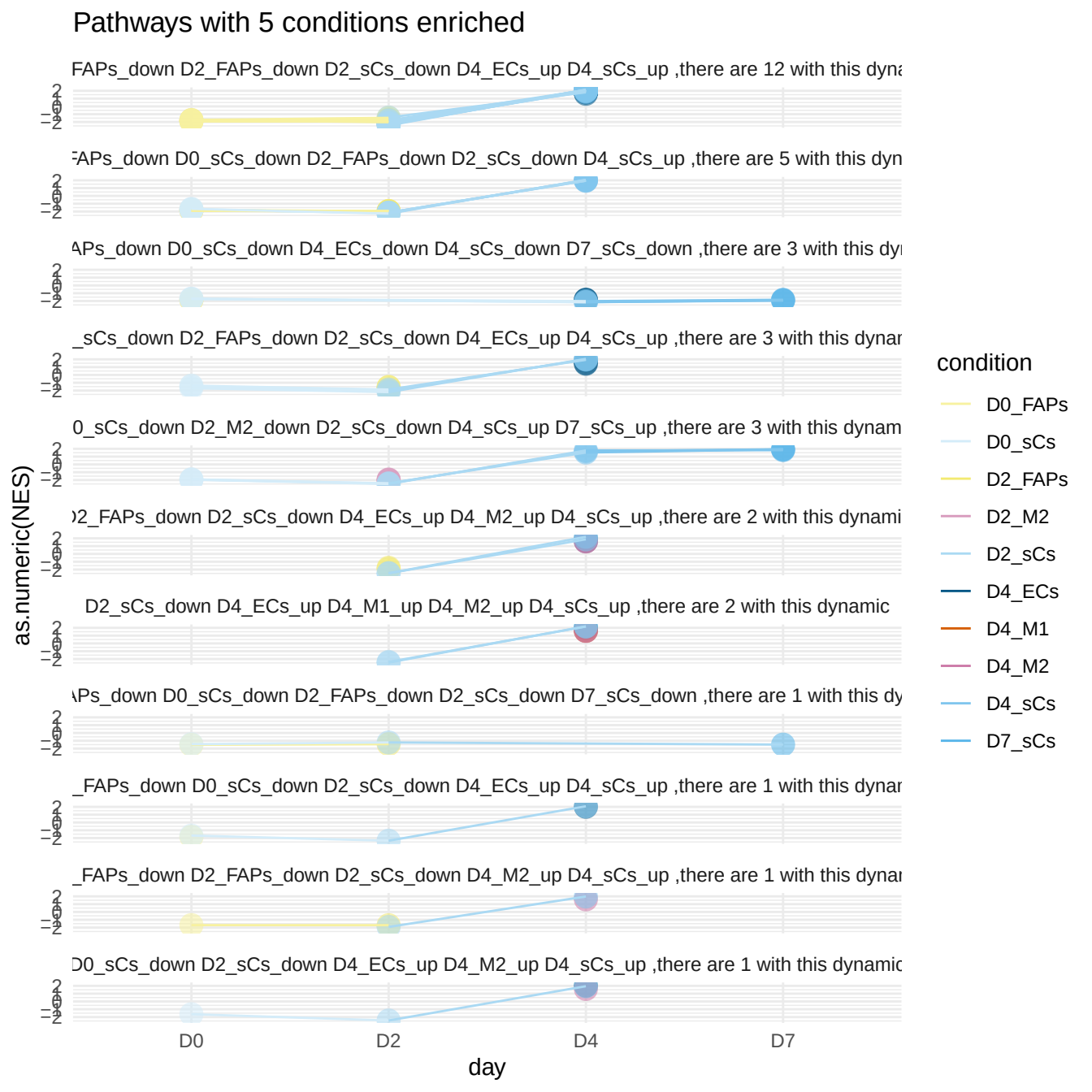

REACTOME_M_PHASE
D4_ECs_Up
D0_FAPs_Down.D2_FAPs_Down
D4_M2_Up
D0_sCs_Down.D2_sCs_Down.D4_sCs_Up
meanTPM
10000
1000
100
10
0
H3c8
Nuf2
Ercc6l
Chmp4c
H2bc8
H2bc15
H4c12
H4c11
H2bc7
Tuba4a
Kntc1
H3c11
H2bc3
Kif23
Mad2l1
Knl1
Cenpf
D0 Young
D0 Old
D2 Young
D2 Old
D4 Young
D4 Old
DayAge
Genes padj <0.05 & |log2F| > 1 DE in
a ECs
a FAPs
a sCs
age
Old
Young
log2F
4
0
−4
−8

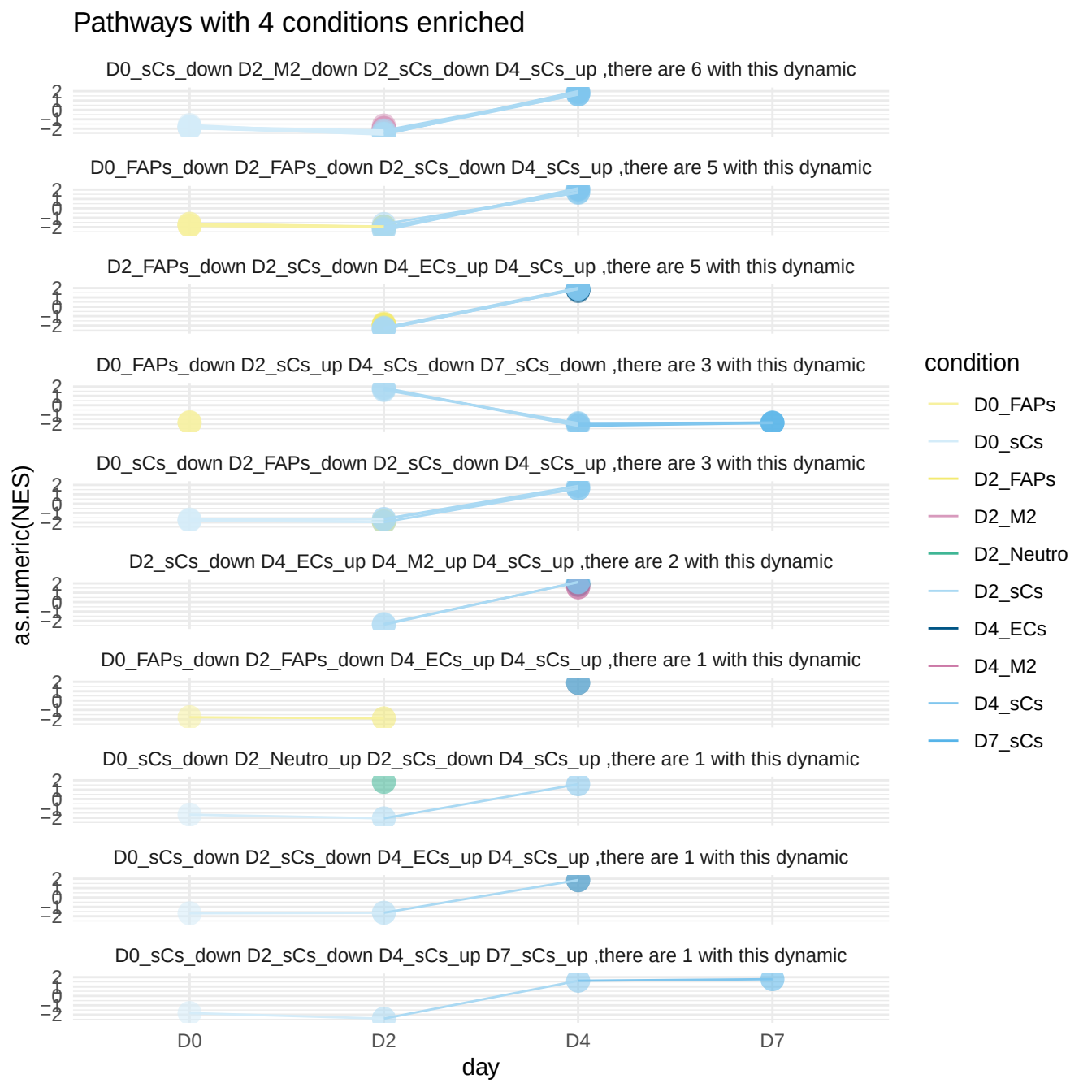

REACTOME_M_PHASE
D4_ECs_Up
D0_FAPs_Down.D2_FAPs_Down
D4_M2_Up
D0_sCs_Down.D2_sCs_Down.D4_sCs_Up
meanTPM
10000
1000
100
10
0
H3c8
Nuf2
Ercc6l
Chmp4c
H2bc8
H2bc15
H2bc7
H4c12
H4c11
Prkcb
Knl1
Tuba4a
H2bc7
H4c11
H3c11
Kif23
Mad2l1
Knl1
Cenpf
D0 Young
D0 Old
D2 Young
D2 Old
D4 Young
D4 Old
DayAge
Genes padj <0.05 & |log2F| > 1 DE in
a ECs
a FAPs
a sCs
age
Old
Young
log2F
4
0
−4
−8

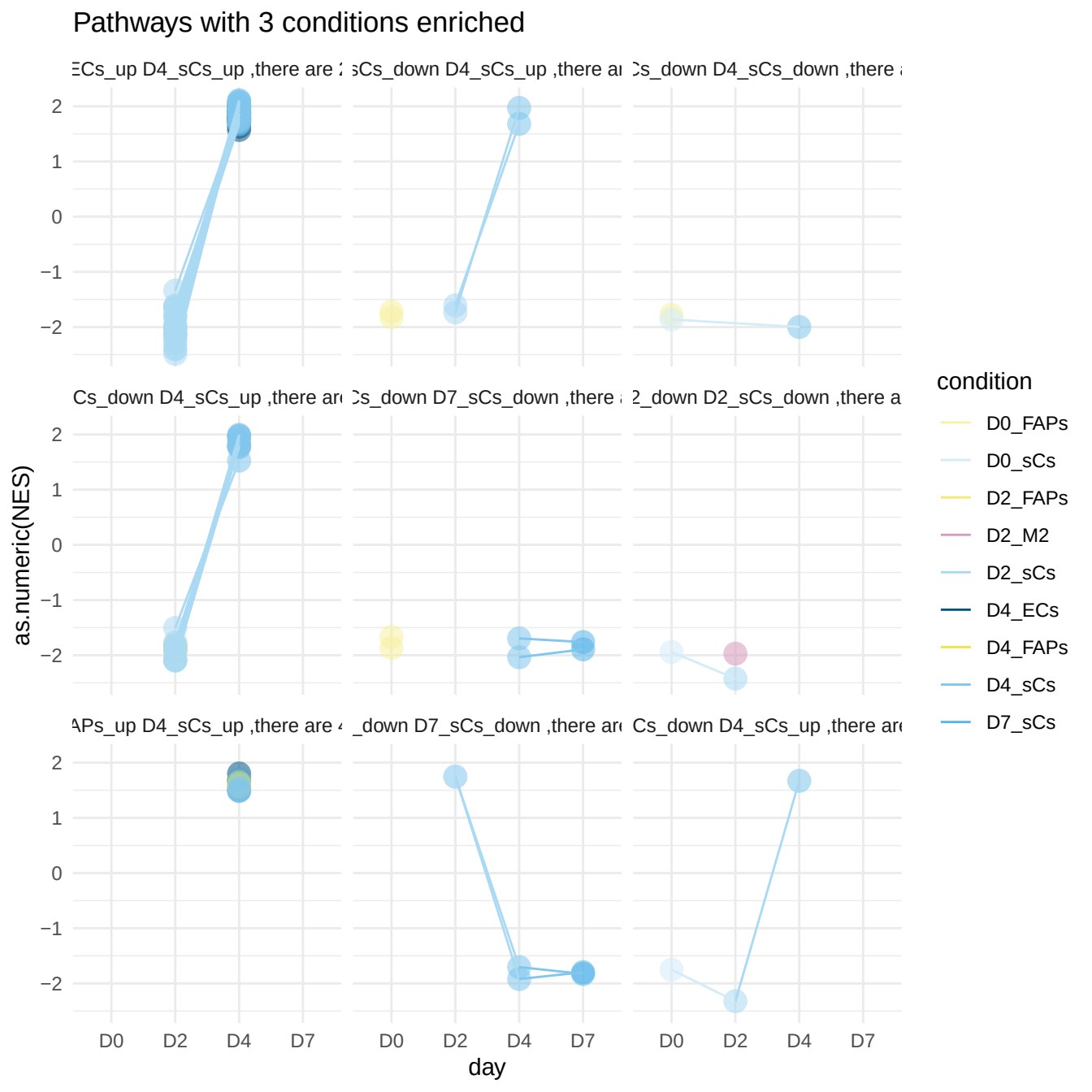

Pathways with 8 conditions enriched
Cs_down D2_FAPs_down D2_sCs_down D4_ECs_up D4_M1_up D4_M2_up D4_sCs_up ,there
as.numeric(NES)
2
1
0
−1
−2
D0
D2
D4
day
condition
D0_FAPs
D0_sCs
D2_FAPs
D2_sCs
D4_ECs
D4_M1
D4_M2
D4_sCs

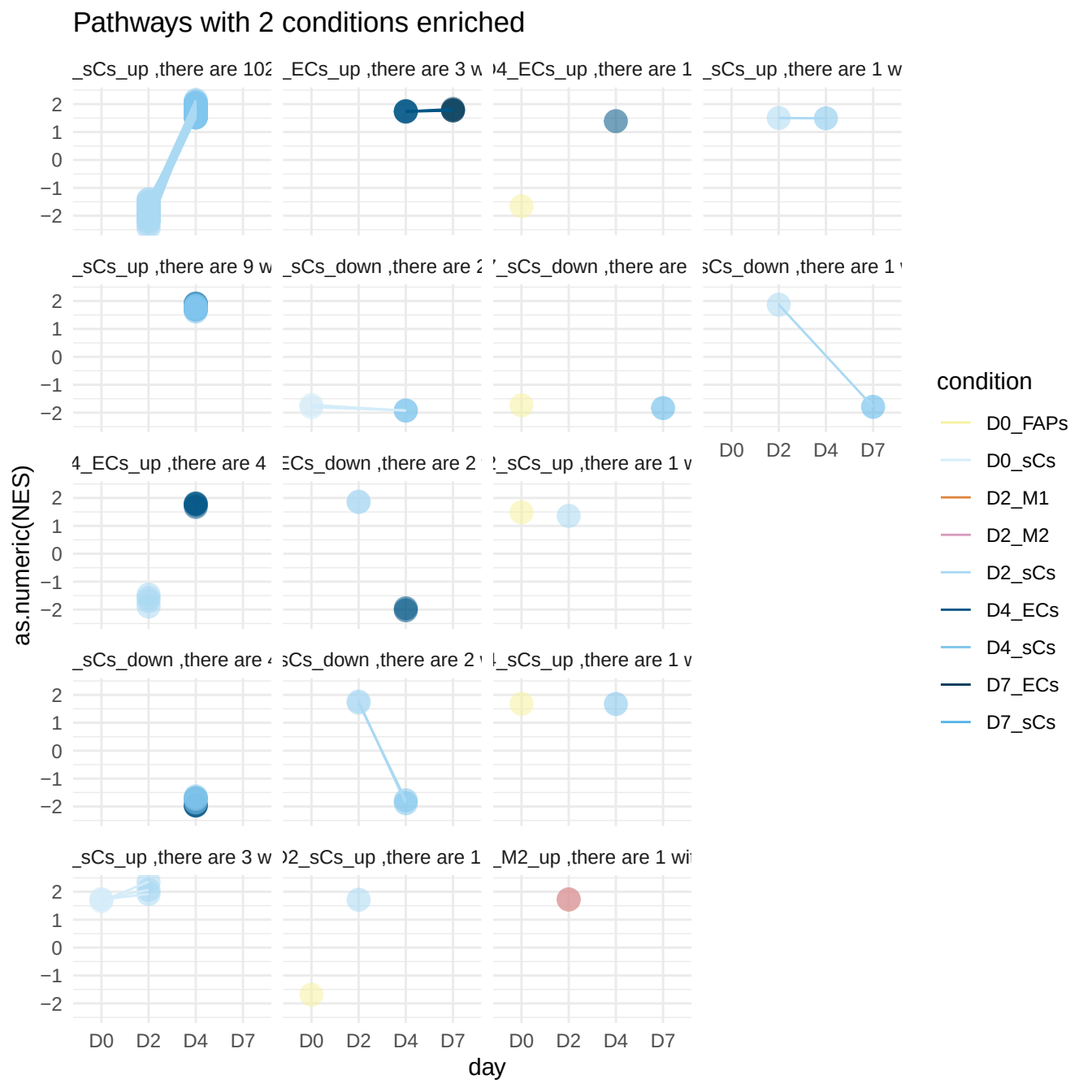

Pathways with 7 conditions enriched
D0_sCs_down D2_FAPs_down D2_sCs_down D4_ECs_up D4_M2_up D4_sCs_up ,there are 3
as.numeric(NES)
2
1
0
−1
−2
D0
D2
D4
day
condition
D0_FAPs
D0_sCs
D2_FAPs
D2_sCs
D4_ECs
D4_M2
D4_sCs


Pathways with 6 conditions enriched
own D0_sCs_down D2_FAPs_down D2_sCs_down D4_ECs_up D4_sCs_up ,there are 17 with t
own D0_sCs_down D2_sCs_up D4_ECs_down D4_sCs_down D7_sCs_down ,there are 2 with t
down D0_sCs_down D2_FAPs_down D2_sCs_down D4_M2_up D4_sCs_up ,there are 1 with th
_down D2_FAPs_down D2_sCs_down D4_ECs_up D4_M2_up D4_sCs_up ,there are 1 with this
_down D2_FAPs_down D2_sCs_down D4_ECs_up D4_M2_up D4_sCs_up ,there are 1 with this
as.numeric(NES)
2
1
0
−1
−2
D0
D2
D4
D7
day
condition
D0_FAPs
D0_sCs
D2_FAPs
D2_sCs
D4_ECs
D4_M2
D4_sCs
D7_sCs


Pathways with 5 conditions enriched
FAPs_down D2_FAPs_down D2_sCs_down D4_ECs_up D4_sCs_up ,there are 12 with this dyna
FAPs_down D0_sCs_down D2_FAPs_down D2_sCs_down D4_sCs_up ,there are 5 with this dyn
APs_down D0_sCs_down D4_ECs_down D4_sCs_down D7_sCs_down ,there are 3 with this dy
_sCs_down D2_FAPs_down D2_sCs_down D4_ECs_up D4_sCs_up ,there are 3 with this dynar
0_sCs_down D2_M2_down D2_sCs_down D4_sCs_up D7_sCs_up ,there are 3 with this dynam
2_FAPs_down D2_sCs_down D4_ECs_up D4_M2_up D4_sCs_up ,there are 2 with this dynami
D2_sCs_down D4_ECs_up D4_M1_up D4_M2_up D4_sCs_up ,there are 2 with this dynamic
APs_down D0_sCs_down D2_FAPs_down D2_sCs_down D7_sCs_down ,there are 1 with this dy
_FAPs_down D0_sCs_down D2_sCs_down D4_ECs_up D4_sCs_up ,there are 1 with this dynar
_FAPs_down D2_FAPs_down D2_sCs_down D4_M2_up D4_sCs_up ,there are 1 with this dynar
D0_sCs_down D2_sCs_down D4_ECs_up D4_M2_up D4_sCs_up ,there are 1 with this dynamic
as.numeric(NES)
D0
D2
D4
D7
day
condition
D0_FAPs
D0_sCs
D2_FAPs
D2_M2
D2_sCs
D4_ECs
D4_M1
D4_M2
D4_sCs
D7_sCs


Pathways with 4 conditions enriched
D0_sCs_down D2_M2_down D2_sCs_down D4_sCs_up ,there are 6 with this dynamic
D0_FAPs_down D2_FAPs_down D2_sCs_down D4_sCs_up ,there are 5 with this dynamic
D2_FAPs_down D2_sCs_down D4_ECs_up D4_sCs_up ,there are 5 with this dynamic
D0_FAPs_down D2_sCs_up D4_sCs_down D7_sCs_down ,there are 3 with this dynamic
D0_sCs_down D2_FAPs_down D2_sCs_down D4_sCs_up ,there are 3 with this dynamic
D2_sCs_down D4_ECs_up D4_M2_up D4_sCs_up ,there are 2 with this dynamic
D0_FAPs_down D2_FAPs_down D4_ECs_up D4_sCs_up ,there are 1 with this dynamic
D0_sCs_down D2_Neutro_up D2_sCs_down D4_sCs_up ,there are 1 with this dynamic
D0_sCs_down D2_sCs_down D4_ECs_up D4_sCs_up ,there are 1 with this dynamic
D0_sCs_down D2_sCs_down D4_sCs_up D7_sCs_up ,there are 1 with this dynamic
2
1
0
−1
−2
as.numeric(NES)
D0
D2
D4
D7
day
condition
D0_FAPs
D0_sCs
D2_FAPs
D2_M2
D2_Neutro
D2_sCs
D4_ECs
D4_M2
D4_sCs
D7_sCs


Pathways with 3 conditions enriched
ECs_up D4_sCs_up ,there are
sCs_down D4_sCs_up ,there ar
Cs_down D4_sCs_down ,there
Cs_down D4_sCs_up ,there ar
Cs_down D7_sCs_down ,there
2_down D2_sCs_down ,there a
APs_up D4_sCs_up ,there are
_down D7_sCs_down ,there ar
Cs_down D4_sCs_up ,there ar
as.numeric(NES)
2
1
0
−1
−2
D0
D2
D4
D7
day
condition
D0_FAPs
D0_sCs
D2_FAPs
D2_M2
D2_sCs
D4_ECs
D4_FAPs
D4_sCs
D7_sCs


Pathways with 2 conditions enriched
_sCs_up ,there are 102
_ECs_up ,there are 3 w
4_ECs_up ,there are 1
_sCs_up ,there are 1 w
_sCs_up ,there are 9 w
_sCs_down ,there are 2
_sCs_down ,there are
sCs_down ,there are 1
4_ECs_up ,there are 4
ECs_down ,there are 2
_sCs_up ,there are 1 w
_sCs_down ,there are
sCs_down ,there are 2
_sCs_up ,there are 1 w
_sCs_up ,there are 3 w
2_sCs_up ,there are 1
_M2_up ,there are 1 wi
as.numeric(NES)
day
D0
D2
D4
D7
condition
D0_FAPs
D0_sCs
D2_M1
D2_M2
D2_sCs
D4_ECs
D4_sCs
D7_ECs
D7_sCs