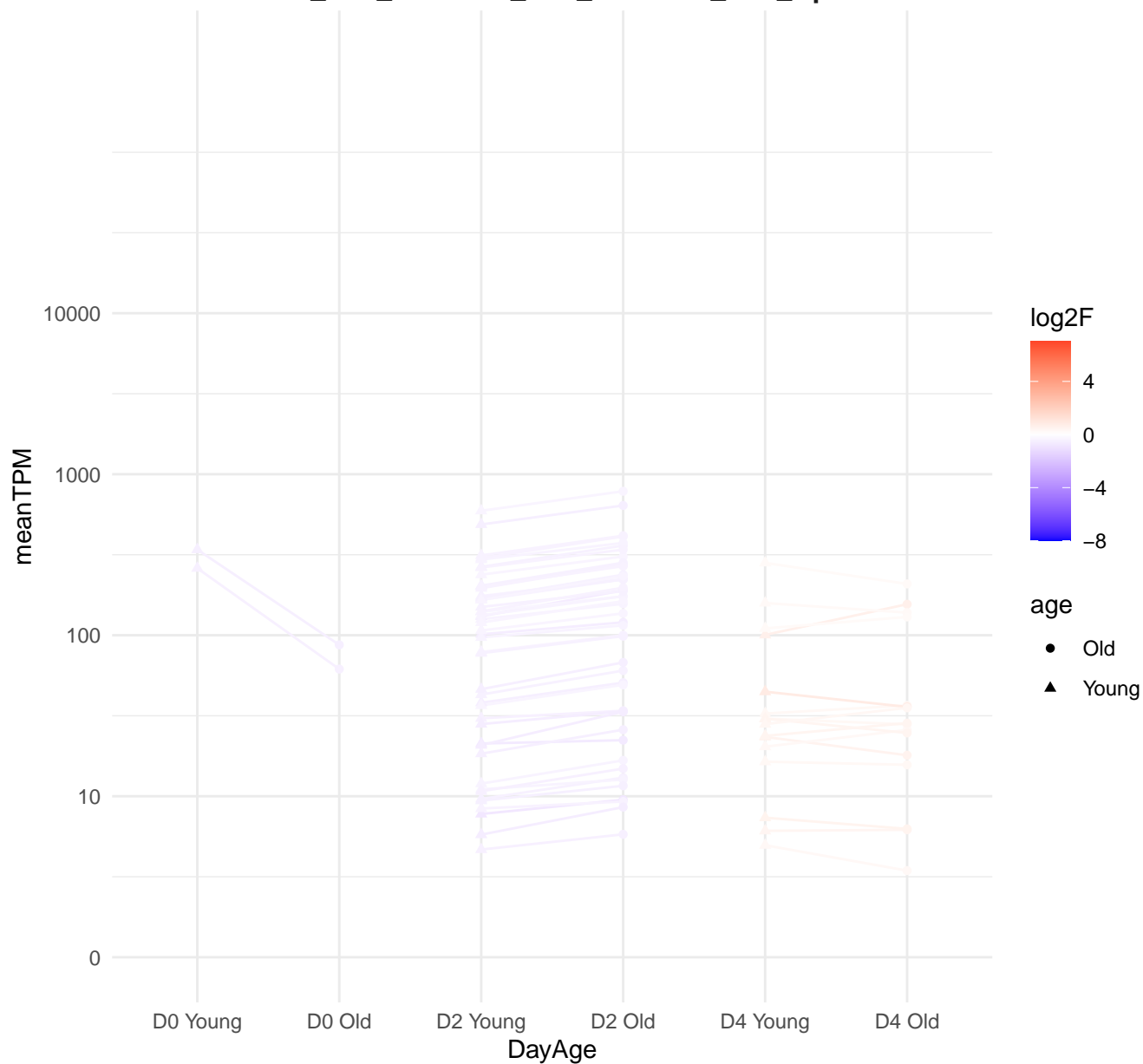


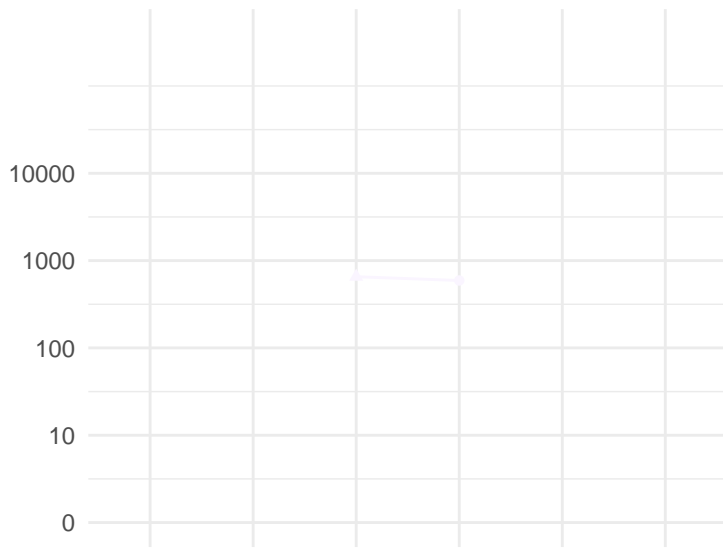
REACTOME_INFLUENZA_INFECTION

D0_sCs_Down.D2_sCs_Down.D4_sCs_Up

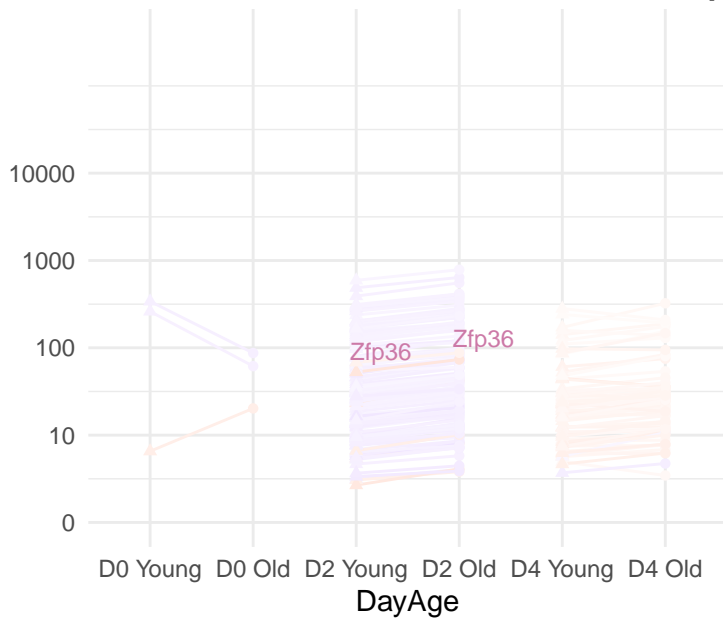


REACTOME_METABOLISM_OF_RNA

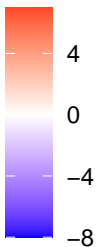
D2_M2_Down



D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



log2F



age

• Old

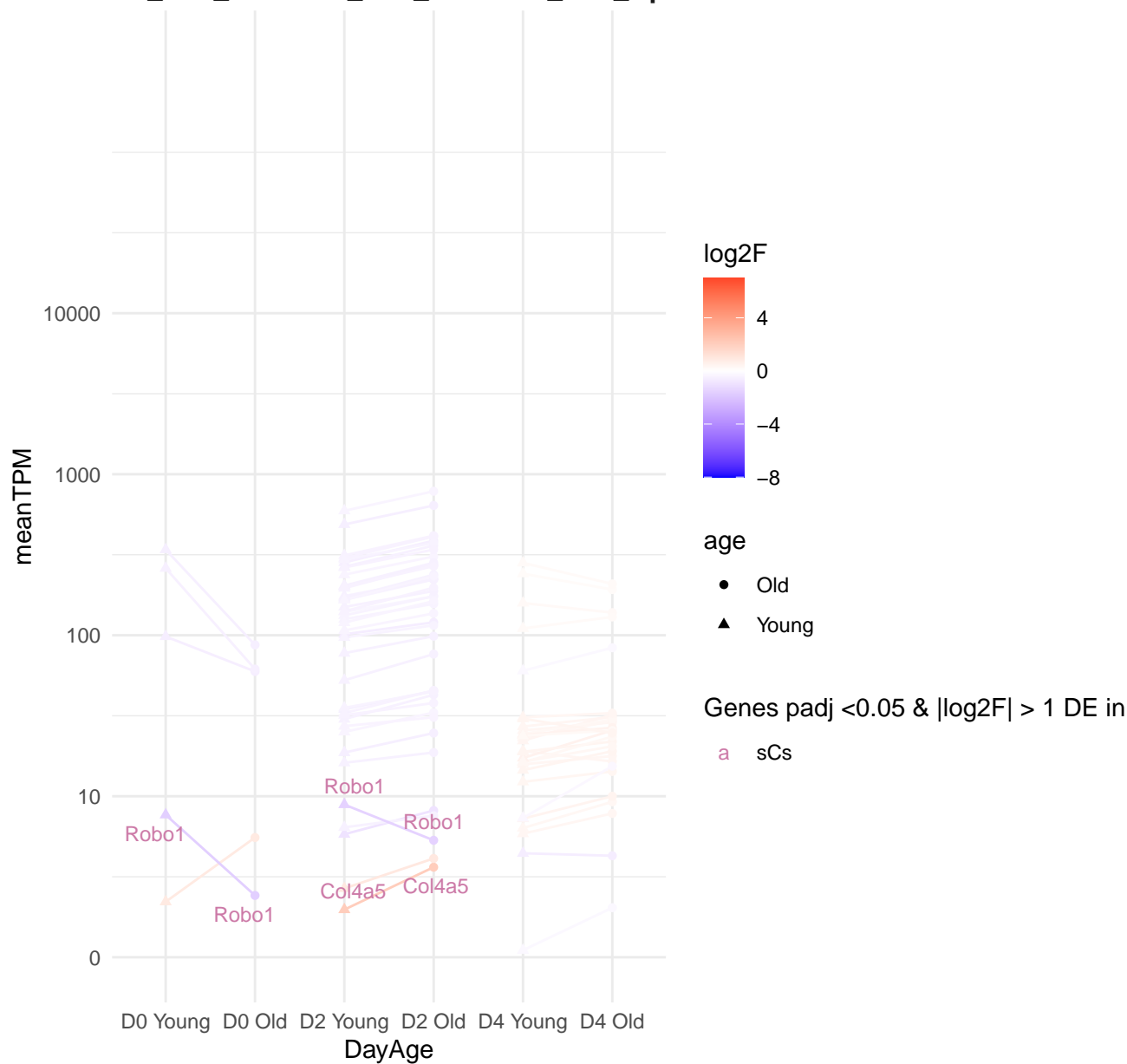
▲ Young

Genes padj < 0.05 & |log2F| > 1 DE in

a sCs

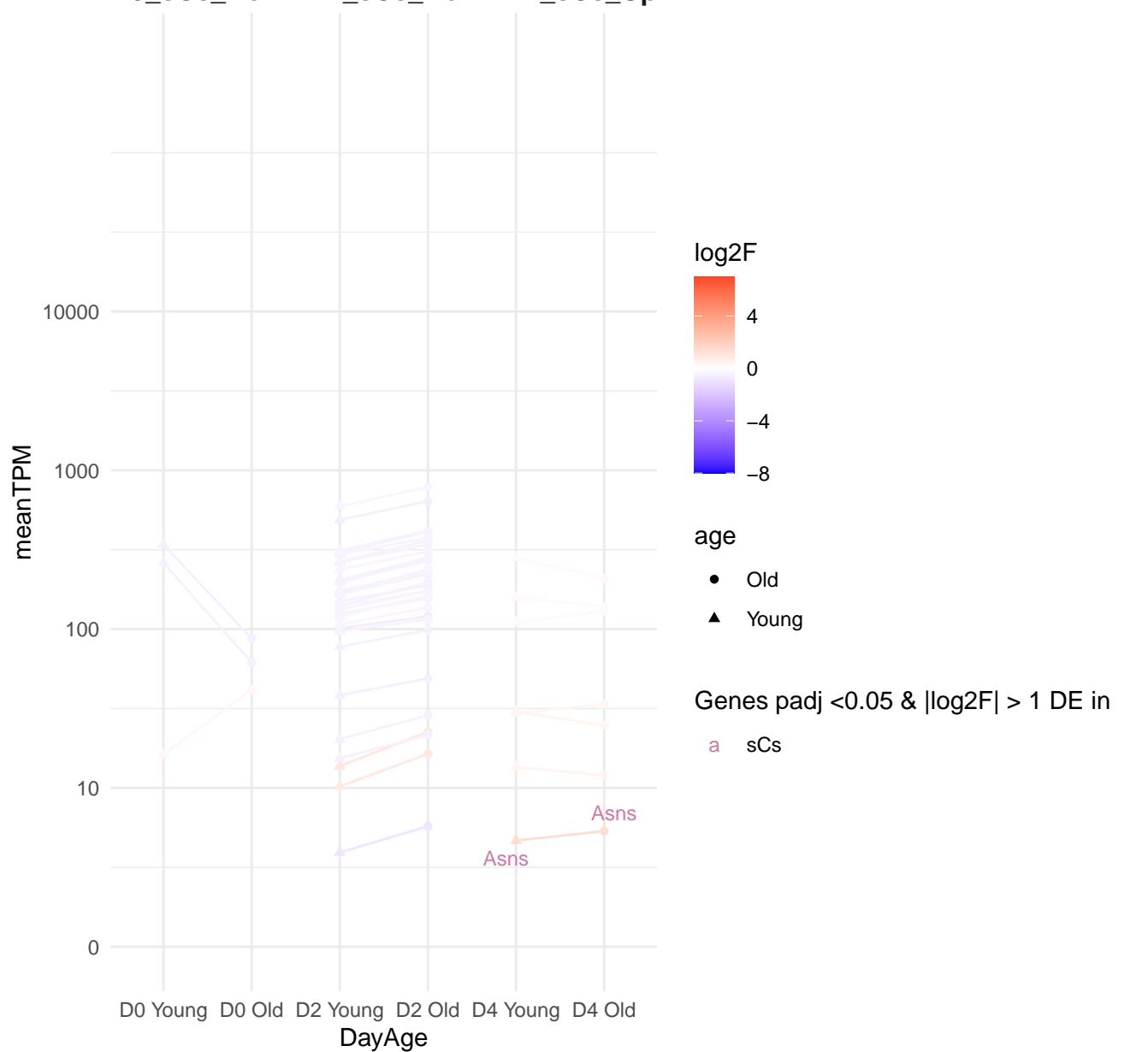
REACTOME_REGULATION_OF_EXPRESSION_OF_SLITS_AND_ROBOS

D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



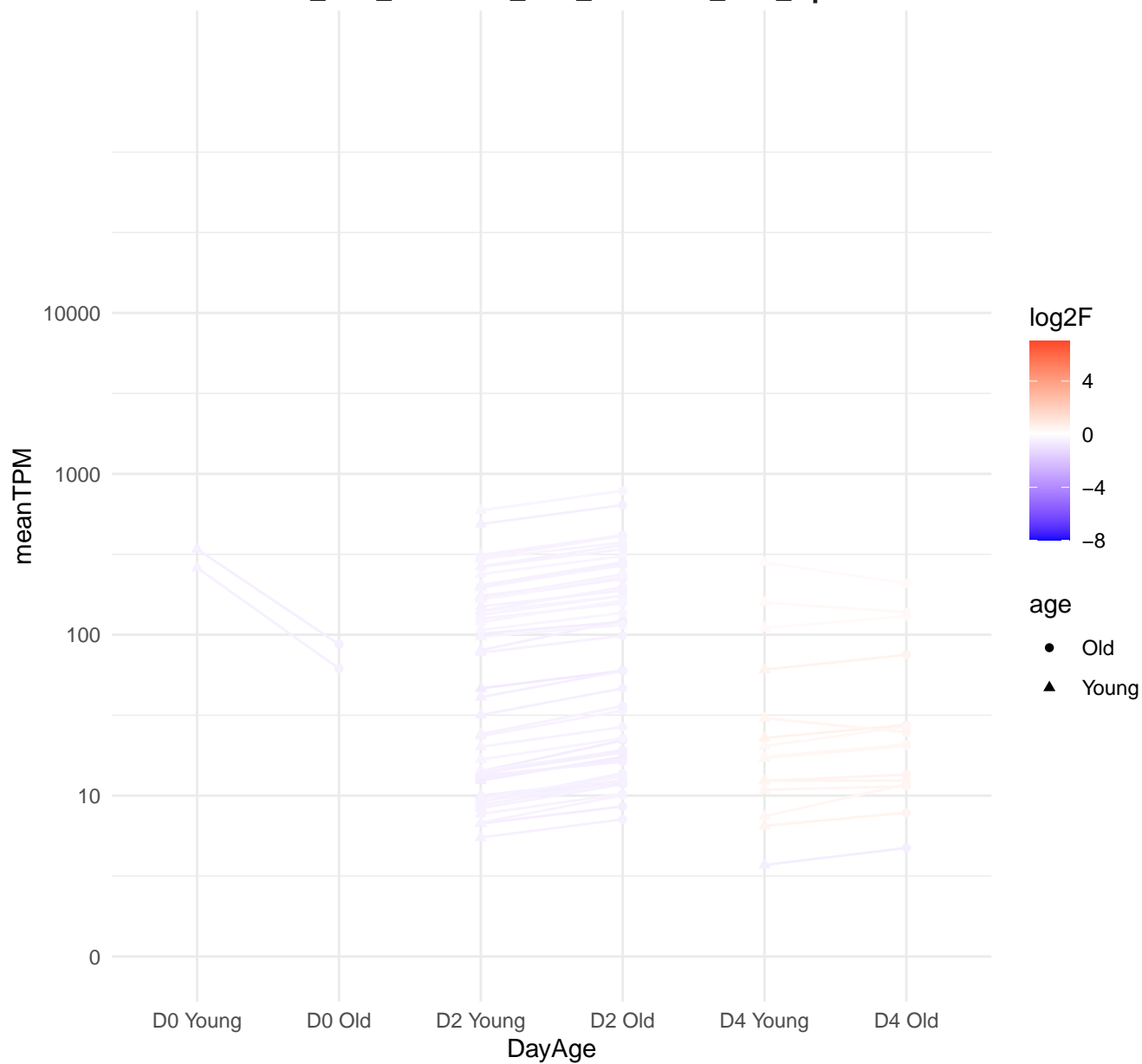
REACTOME_RESPONSE_OF{EIF2AK4_GCN2_TO_AMINO_ACID_DEFICIEN

D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



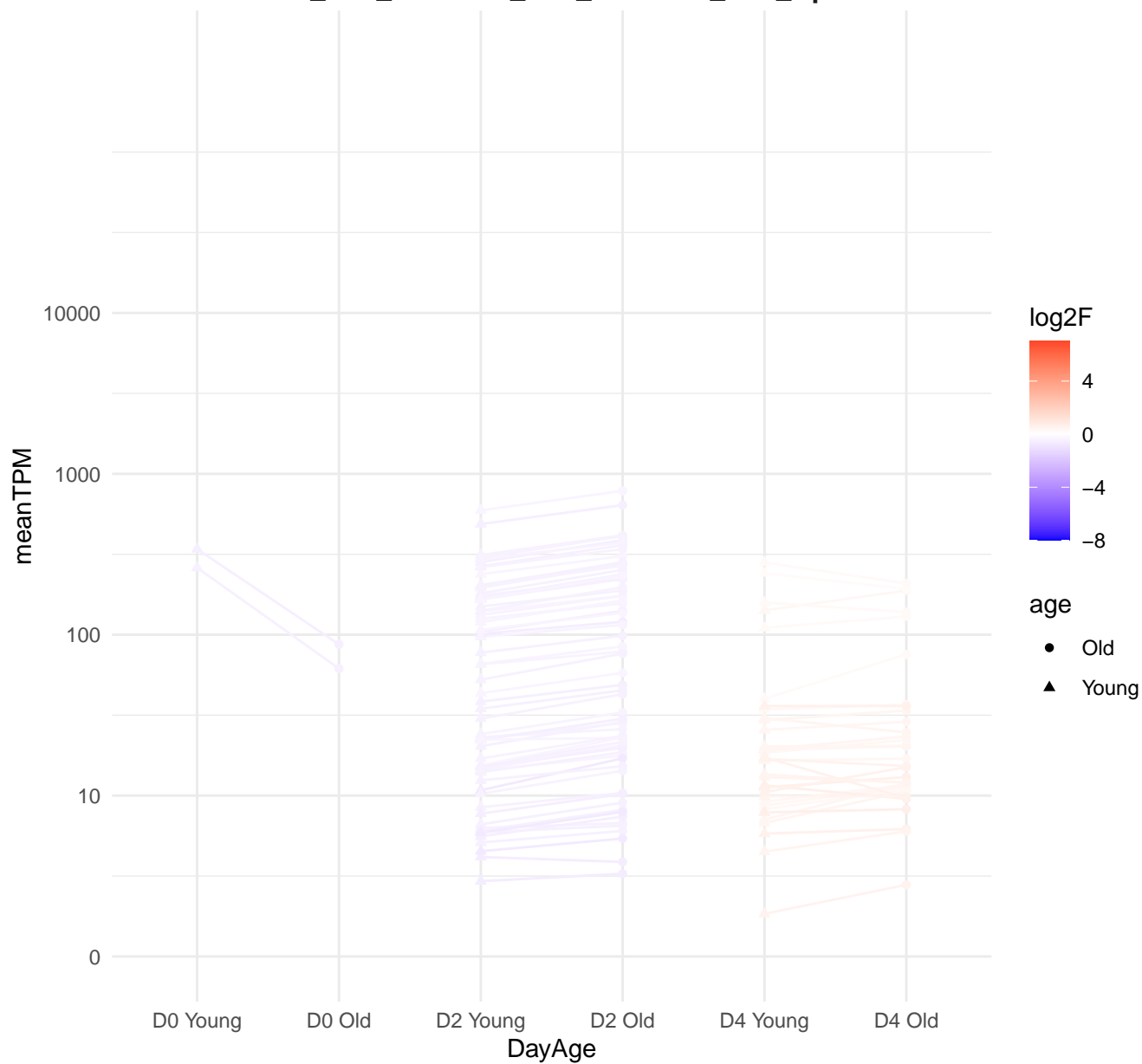
REACTOME_RRNA_PROCESSING

D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



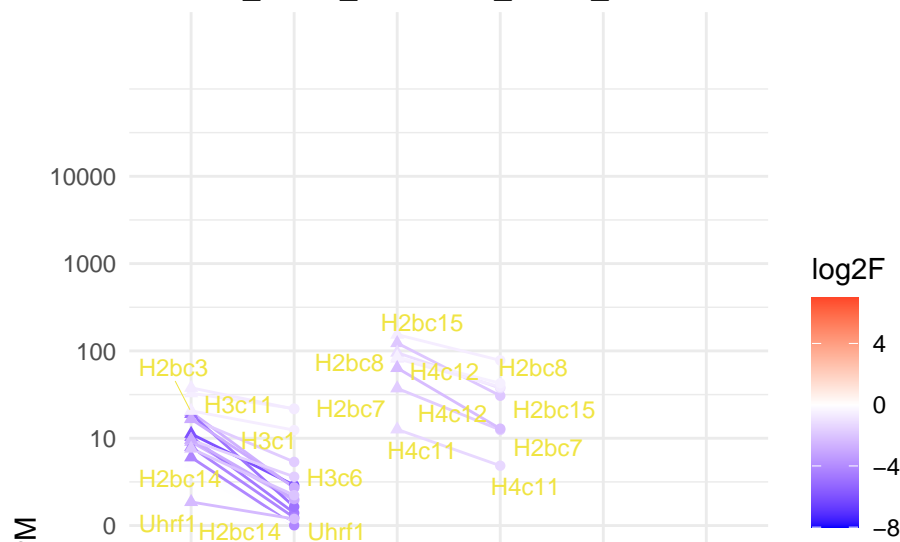
REACTOME_TRANSLATION

D0_sCs_Down.D2_sCs_Down.D4_sCs_Up

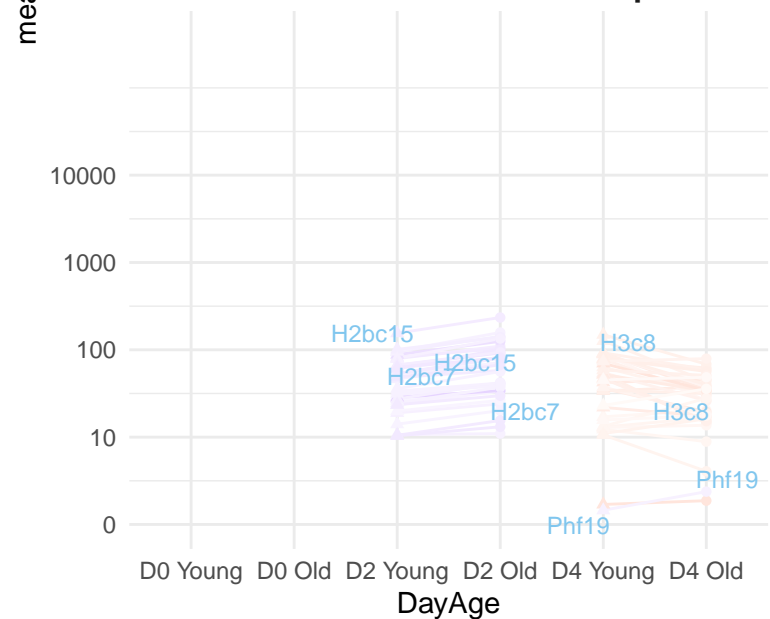


REACTOME_EPIGENETIC_REGULATION_OF_GENE_EXPRESSION

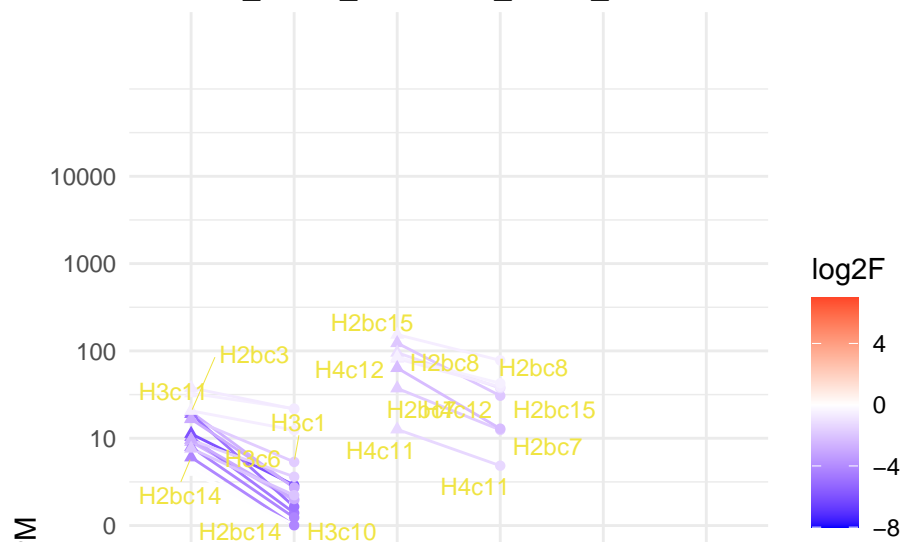
D0_FAPs_Down.D2_FAPs_Down



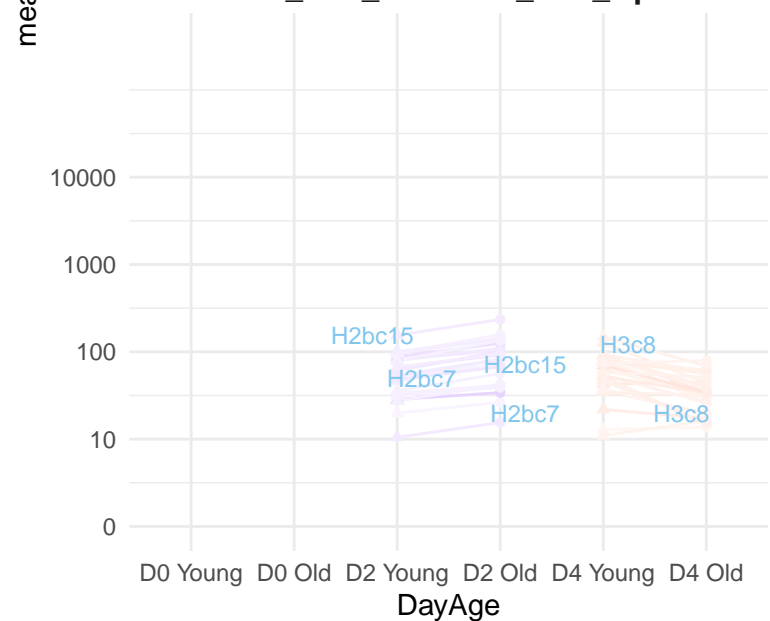
D2_sCs_Down.D4_sCs_Up



D0_FAPs_Down.D2_FAPs_Down



D2_sCs_Down.D4_sCs_Up



Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

age

• Old

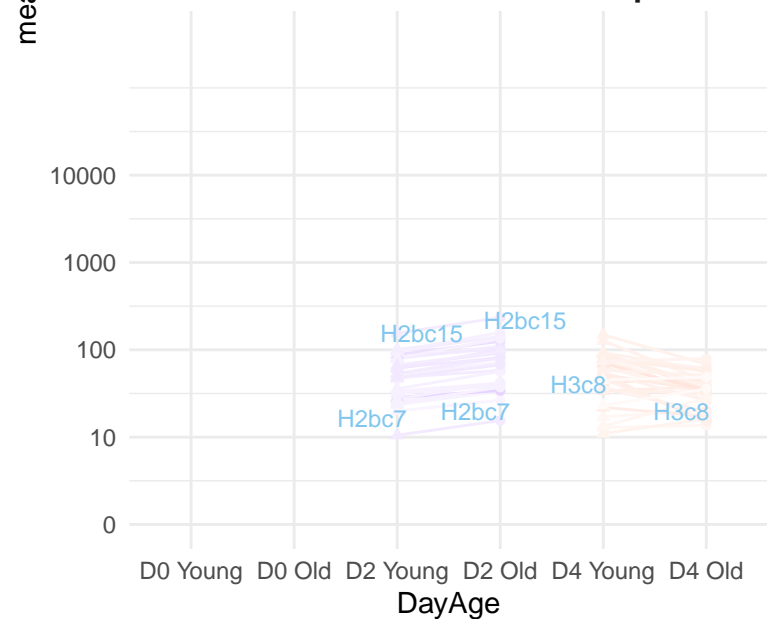
▲ Young

REACTOME POSITIVE EPIGENETIC REGULATION OF RRNA EXPRESS

D0_FAPs_Down.D2_FAPs_Down



D2_sCs_Down.D4_sCs_Up



Genes $p_{adj} < 0.05$ & $|\log_2 F| > 1$ DE in

a FAPs

a sCs

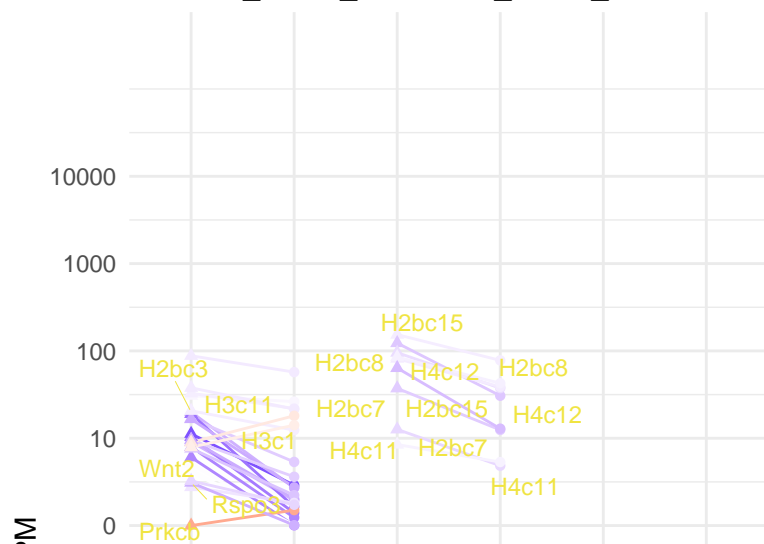
age

- Old

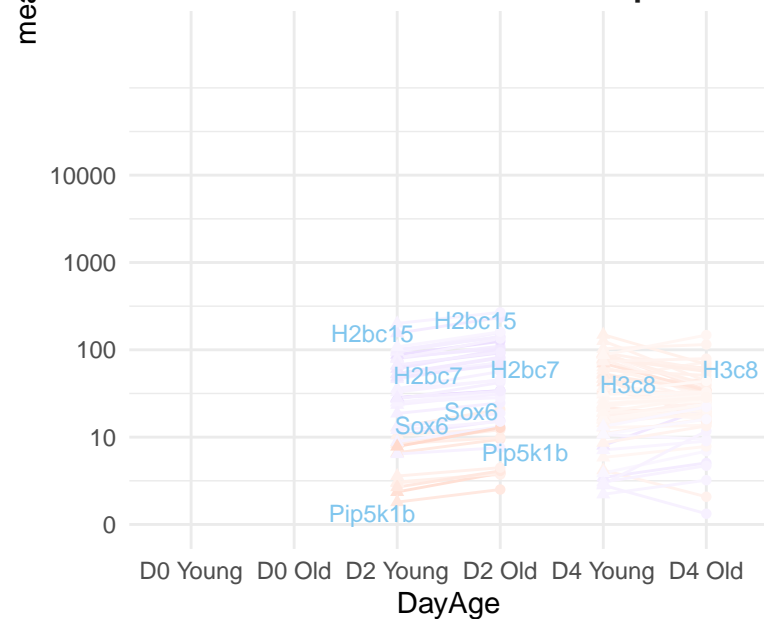
▲ Young

REACTOME_SIGNALING_BY_WNT

D0_FAPs_Down.D2_FAPs_Down

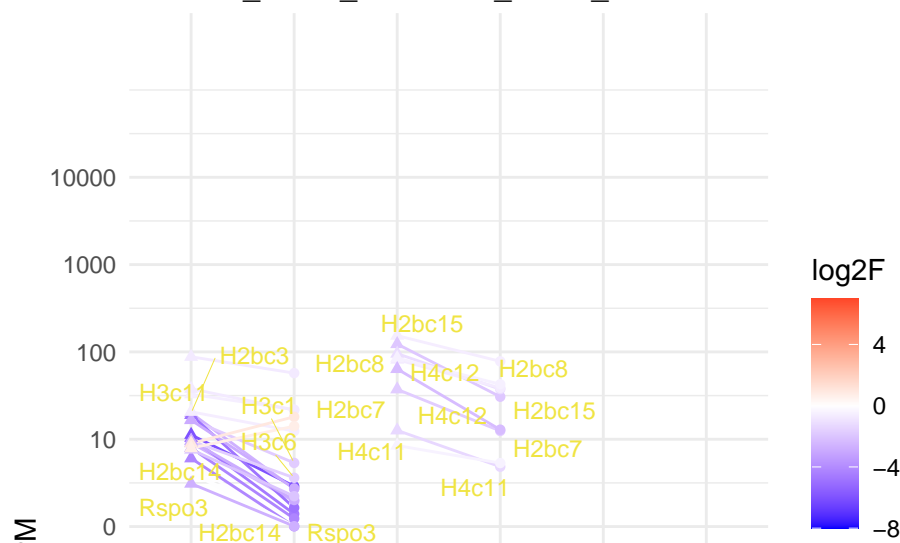


D2_sCs_Down.D4_sCs_Up

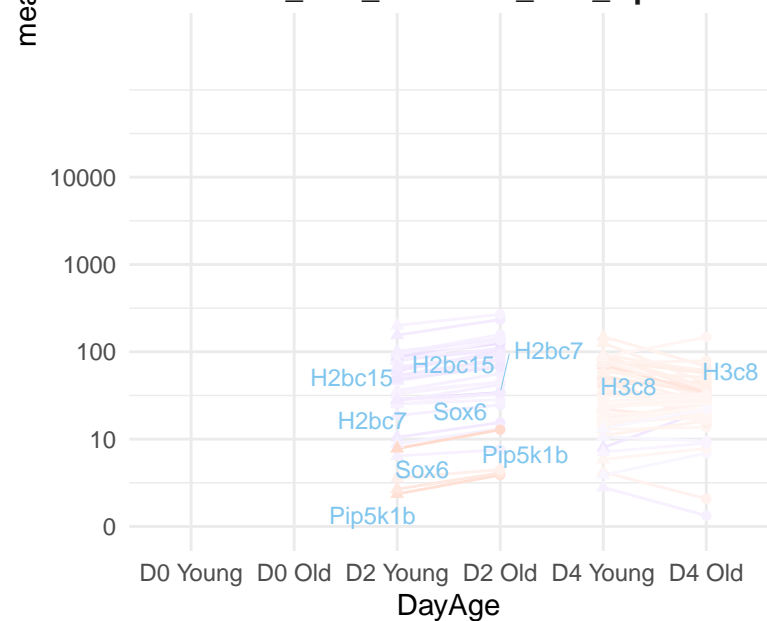


REACTOME_TCF_DEPENDENT_SIGNALING_IN_RESPONSE_TO_WNT

D0_FAPs_Down.D2_FAPs_Down

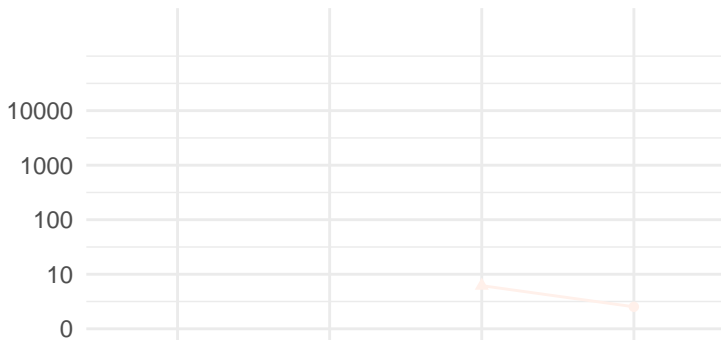


D2_sCs_Down.D4_sCs_Up

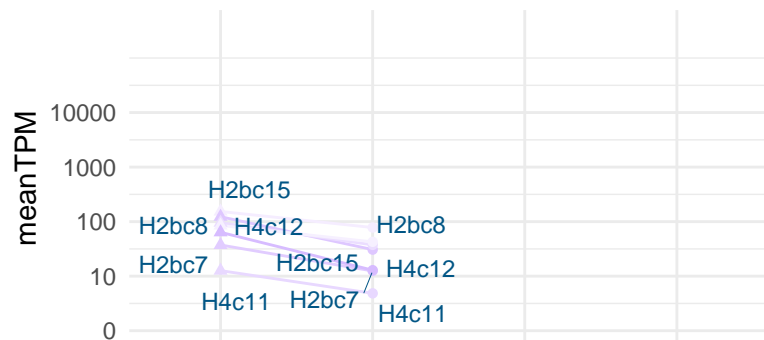


REACTOME_DEPOSITION_OF_NEW_CENPA_CONTAINING_NUCLEOSOME

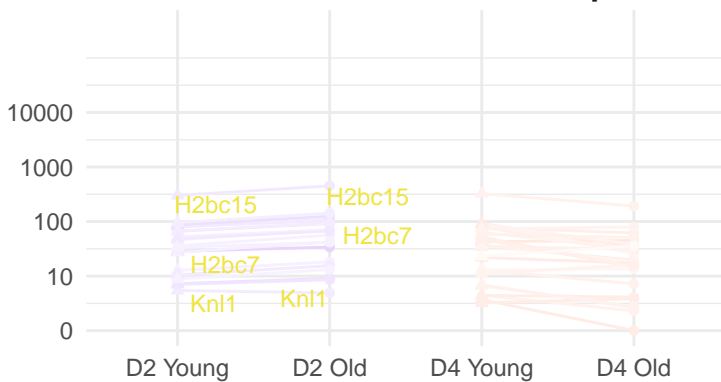
D4_EC_s_Up



D2_FAPs_Down



D2_sCs_Down.D4_sCs_Up



log₂F



Genes padj < 0.05 & |log₂F| > 1 DE in

a FAPs

a sCs

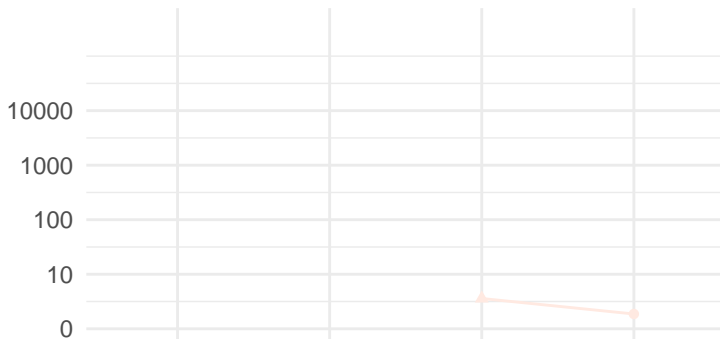
age

• Old

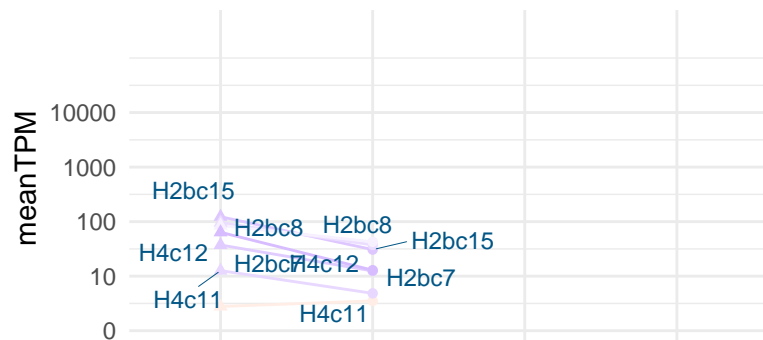
▲ Young

REACTOME_DNA_DOUBLE_STRAND_BREAK_REPAIR

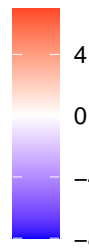
D4_ECs_Up



D2_FAPs_Down



log2F

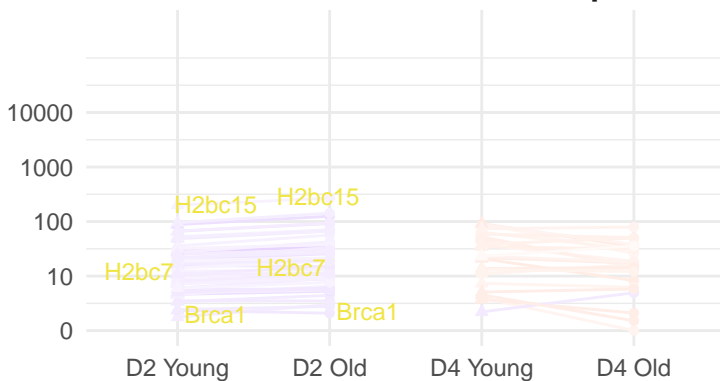


Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

D2_sCs_Down.D4_sCs_Up



age

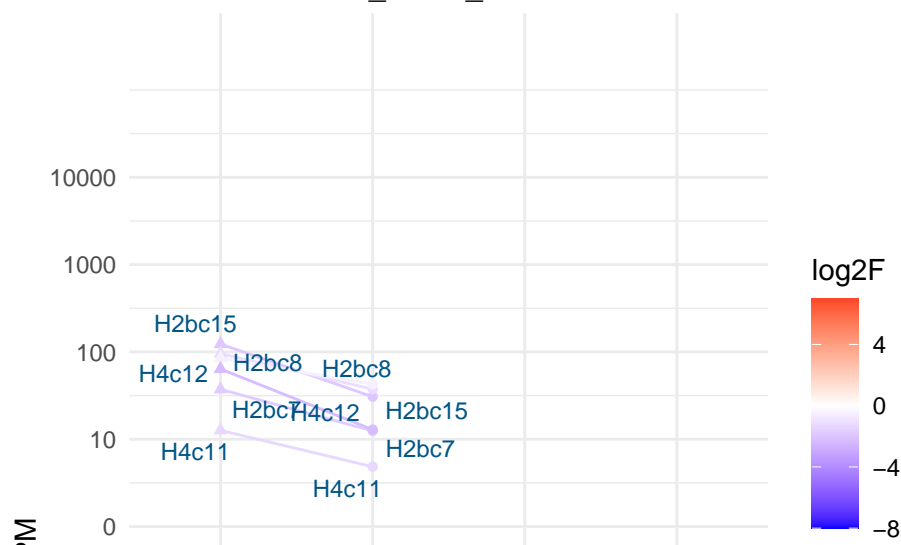
• Old

▲ Young

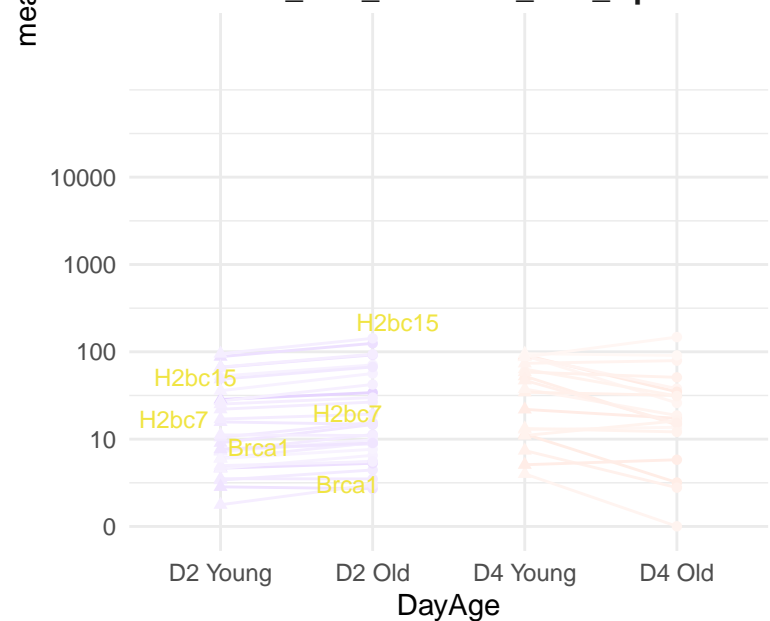
DayAge

REACTOME_G2_M_DNA_DAMAGE_CHECKPOINT

D2_FAPs_Down

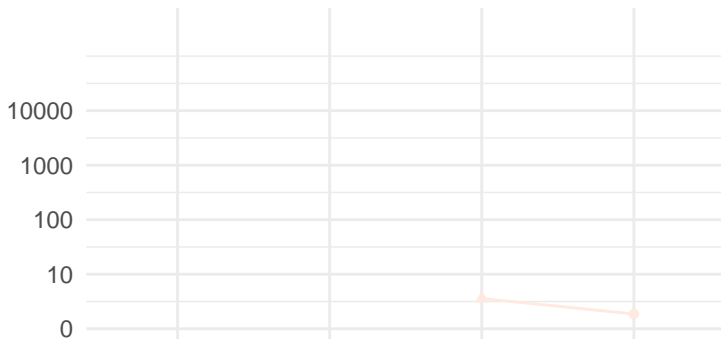


D2_sCs_Down.D4_sCs_Up

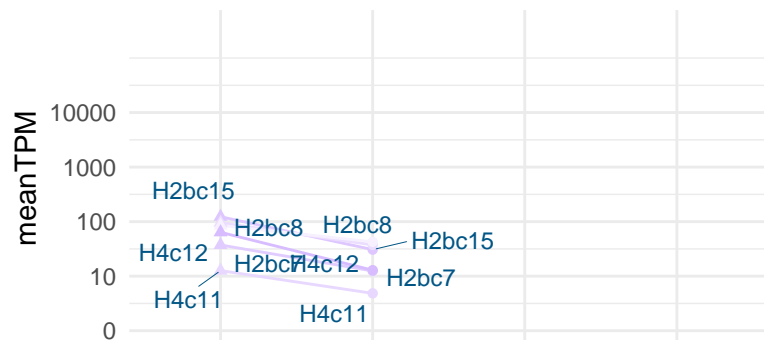


REACTOME_HOMOLOGY_DIRECTED_REPAIR

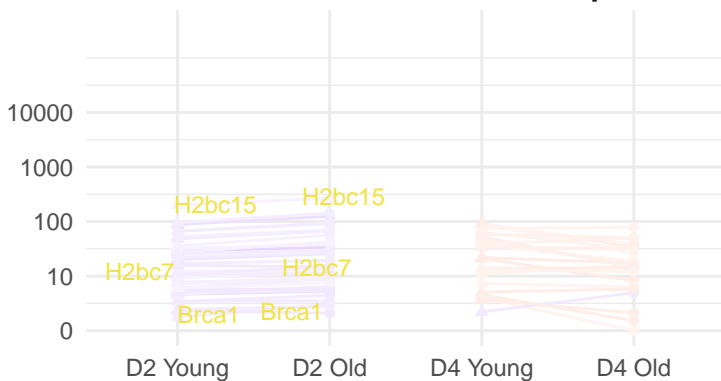
D4_ECs_Up



D2_FAPs_Down



D2_sCs_Down.D4_sCs_Up



log2F



Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

age

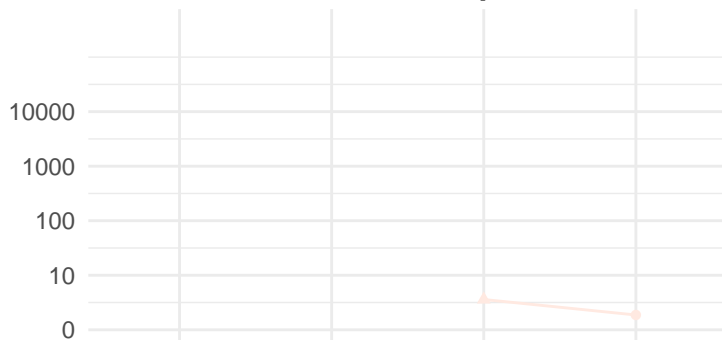
• Old

▲ Young

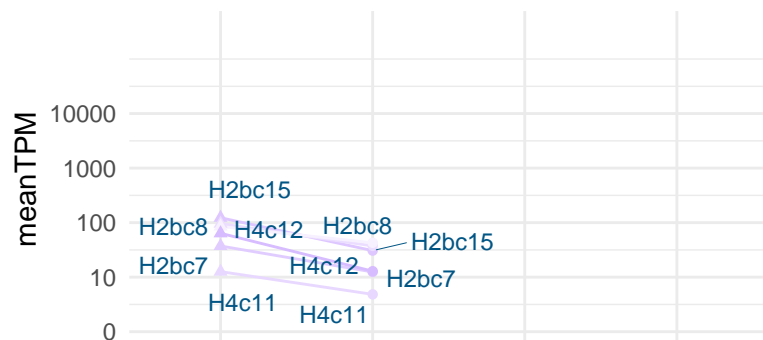
DayAge

REACTOME_PROCESSING_OF_DNA_DOUBLE_STRAND_BREAK_ENDS

D4_ECs_Up



D2_FAPs_Down



log2F

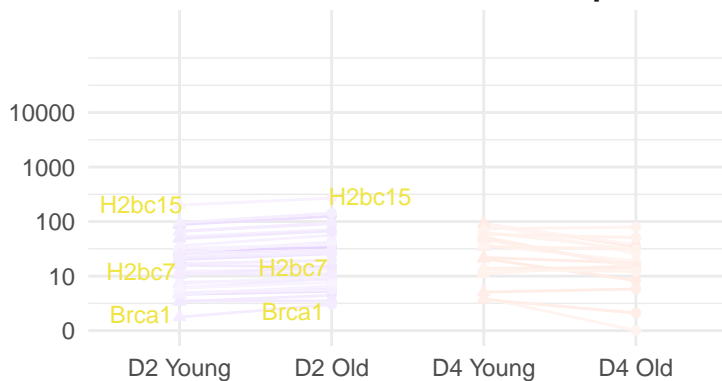


Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

D2_sCs_Down.D4_sCs_Up



age

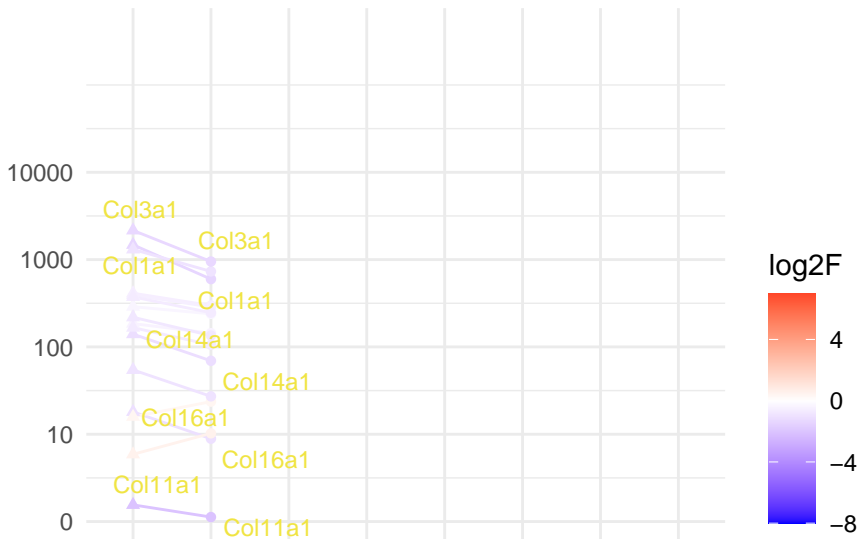
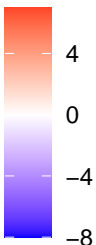
• Old

▲ Young

DayAge

REACTOME_COLLAGEN_DEGRADATION

D0_FAPs_Down

 $\log_2 F$ 

Genes $p_{adj} < 0.05$ & $|\log_2 F| > 1$ DE in

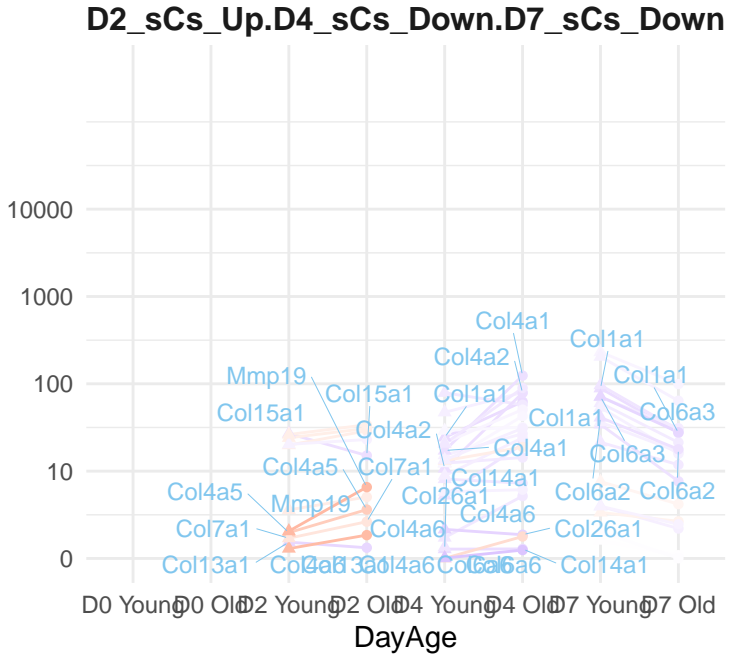
a FAPs

a sCs

age

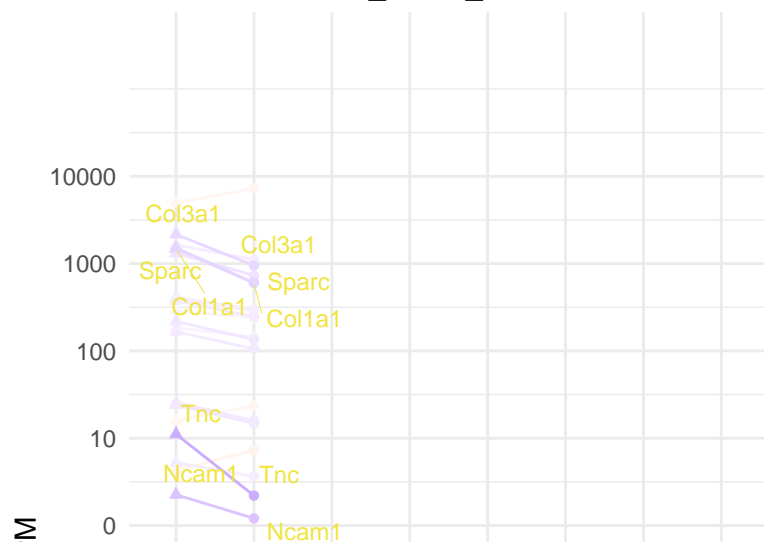
- Old

▲ Young

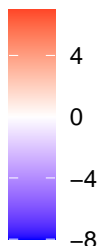


REACTOME_ECM_PROTEOGLYCAN

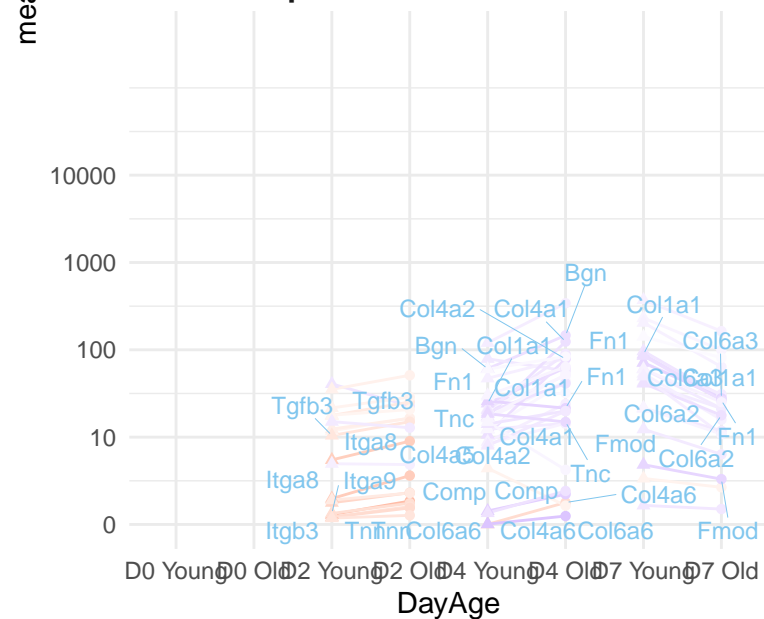
D0_FAPs_Down



log2F



D2_sCs_Up.D4_sCs_Down.D7_sCs_Down



Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

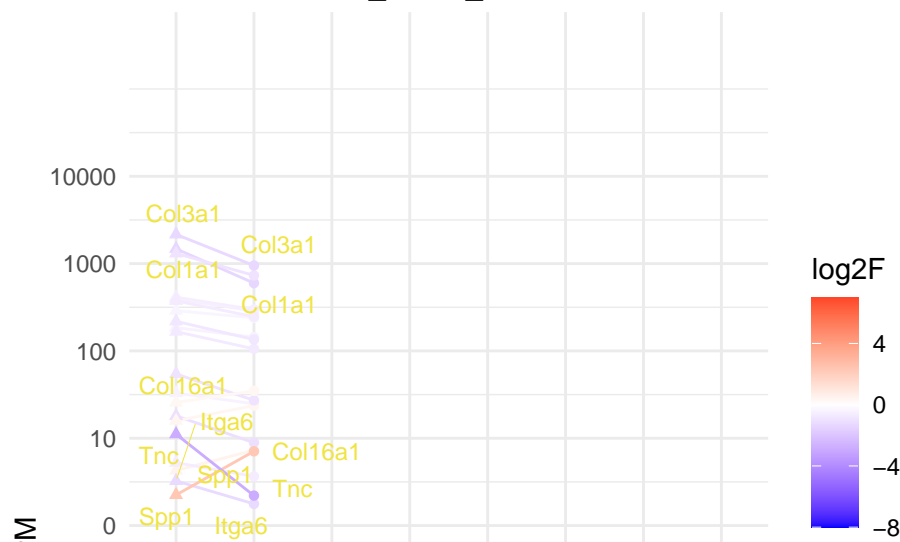
age

• Old

▲ Young

REACTOME_INTEGRIN_CELL_SURFACE_INTERACTIONS

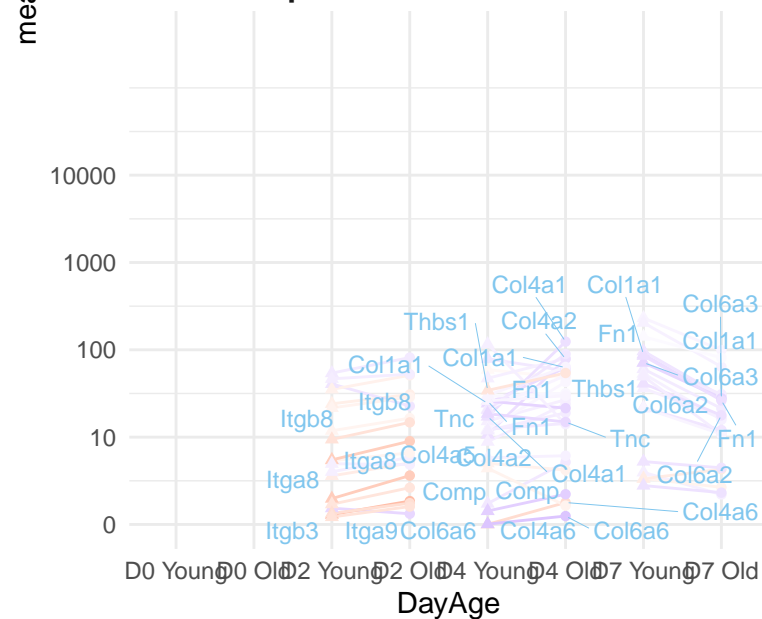
D0_FAPs_Down



log2F



D2_sCs_Up.D4_sCs_Down.D7_sCs_Down



Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

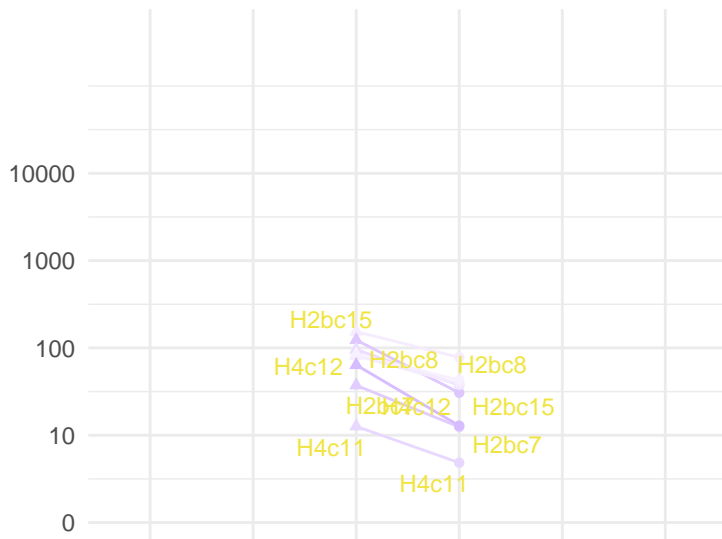
age

● Old

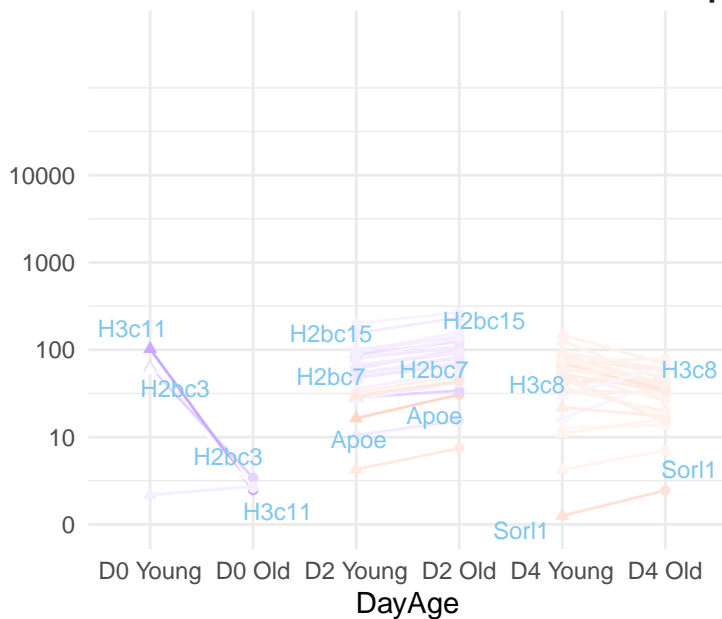
▲ Young

REACTOME_AMYLOID_FIBER_FORMATION

D2_FAPs_Down

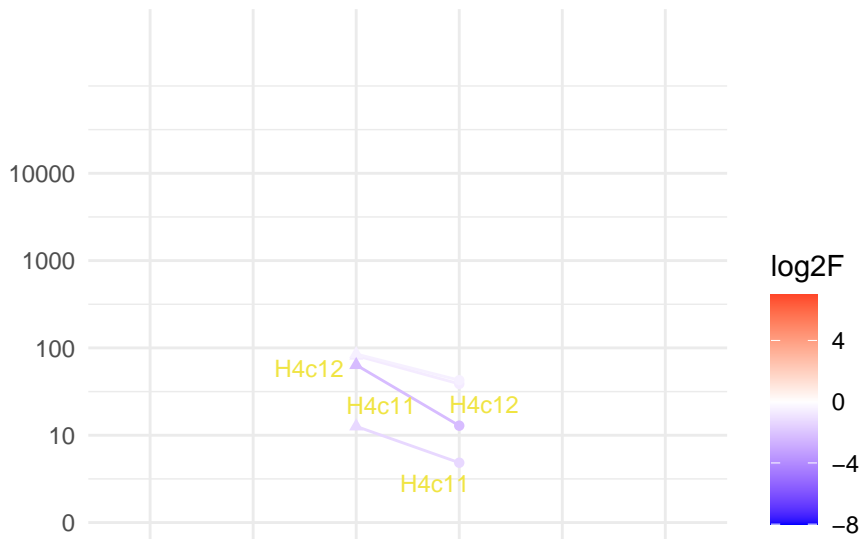


D0_sCs_Down.D2_sCs_Down.D4_sCs_Up

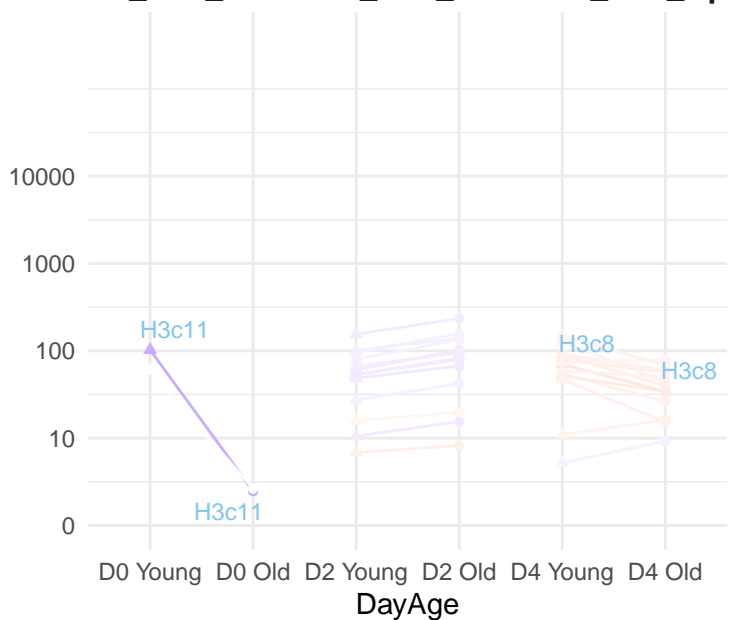


REACTOME_HDMS_DEMETHYLATE_HISTONES

D2_FAPs_Down



D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

age

• Old

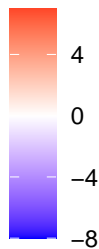
▲ Young

REACTOME_PRE_NOTCH_EXPRESSION_AND_PROCESSING

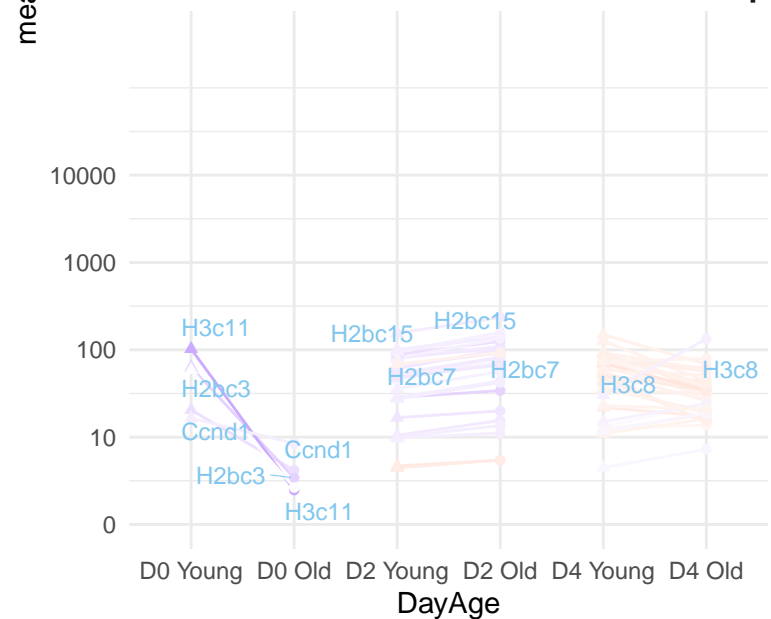
D2_FAPs_Down



log2F



D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



Genes padj <0.05 & |log2F| > 1 DE in

a FAPs

a sCs

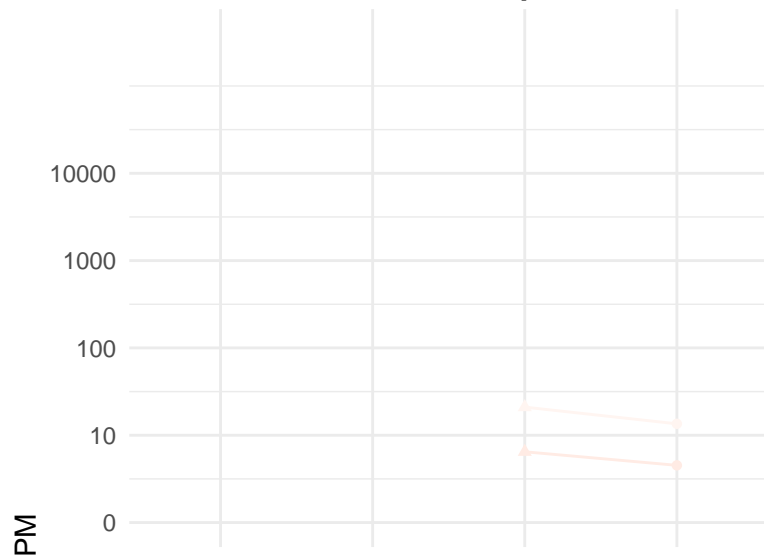
age

• Old

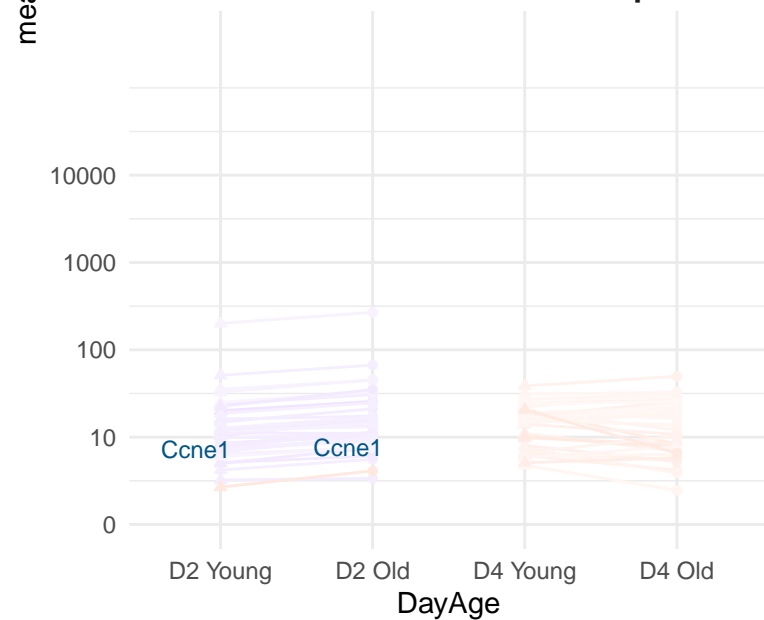
▲ Young

REACTOME_DNA_REPLICATION

D4_EC_s_Up

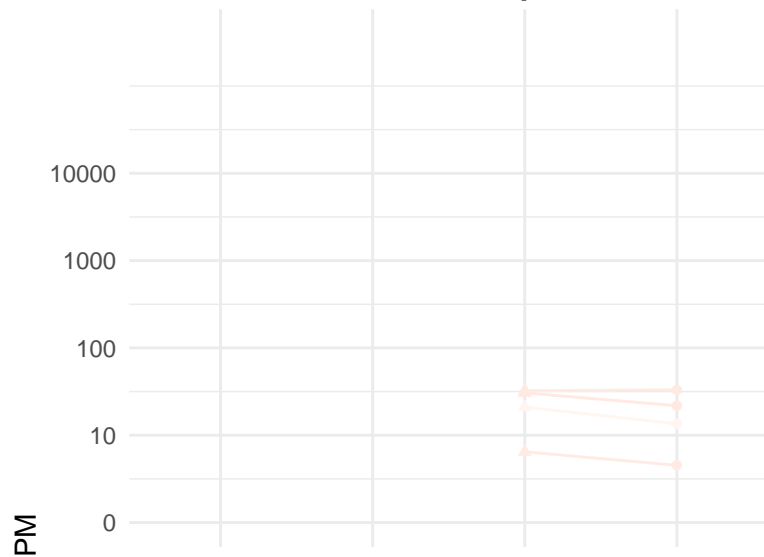


D2_sCs_Down.D4_sCs_Up

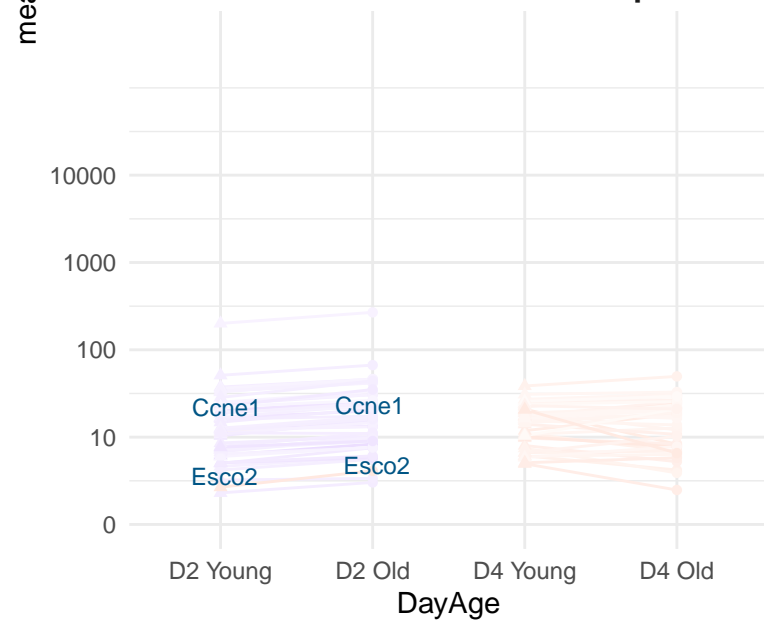


REACTOME_S_PHASE

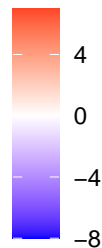
D4_ECUs_Up



D2_sCs_Down.D4_sCs_Up



log2F



age

● Old

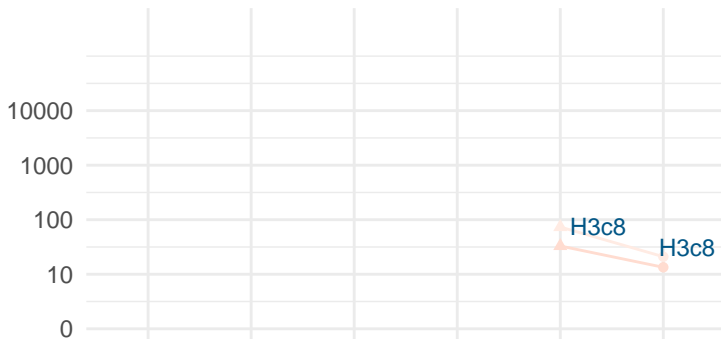
▲ Young

Genes padj < 0.05 & |log2F| > 1 DE in

a sCs

REACTOME_RHO_GTPASES_ACTIVATE_PKNS

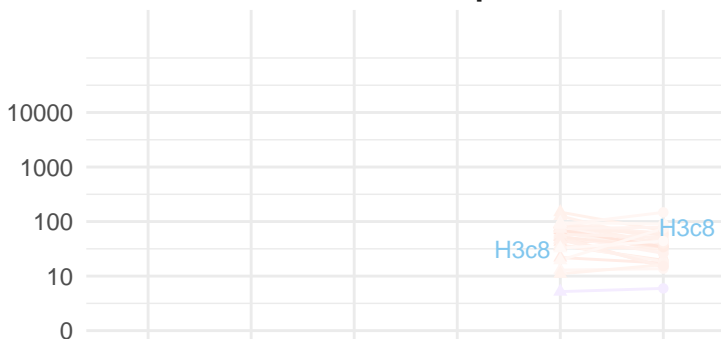
D4_EC_s_Up



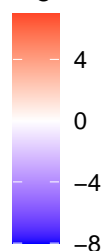
D0_FAP_s_Down.D2_FAP_s_Down



D4_sC_s_Up



log₂F



Genes padj < 0.05 & |log₂F| > 1 DE in

a EC_s

a FAP_s

a sC_s

age

● Old

▲ Young

D0 Young D0 Old D2 Young D2 Old D4 Young D4 Old

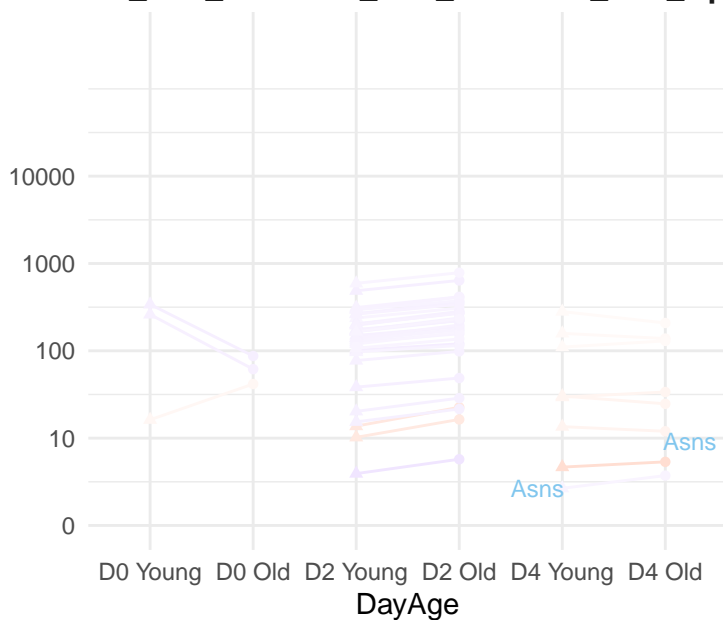
DayAge

REACTOME_CELLULAR_RESPONSE_TO_STARVATION

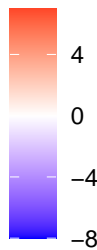
D2_Neutro_Up



D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



log2F



age

● Old

▲ Young

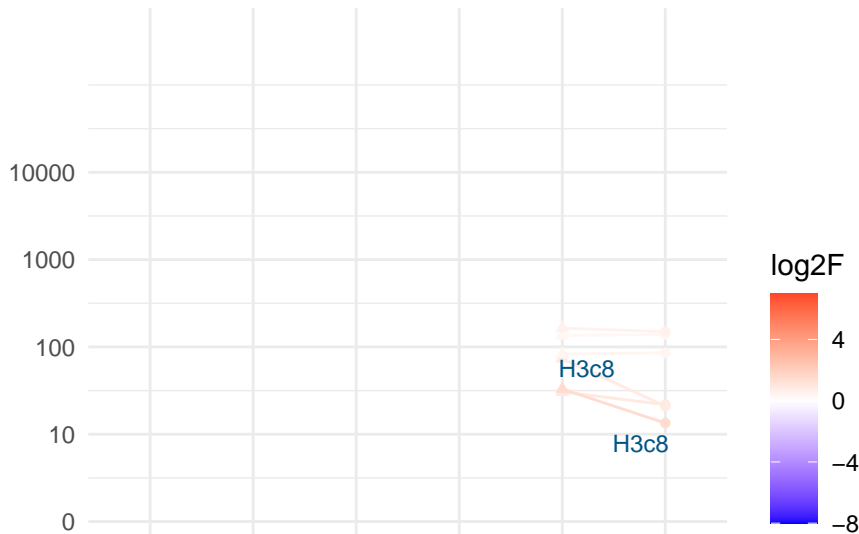
Genes padj < 0.05 & |log2F| > 1 DE in

a Neutro

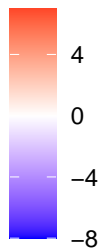
a sCs

REACTOME_ESR_MEDIATED_SIGNALING

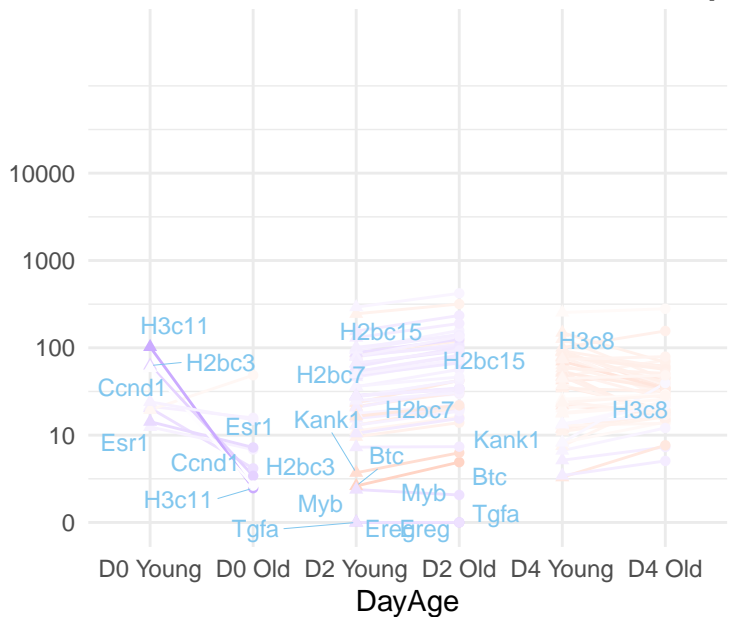
D4_EC_s_Up



log2F



D0_sCs_Down.D2_sCs_Down.D4_sCs_Up



Genes padj <0.05 & |log2F| > 1 DE in

a ECs

a sCs

age

• Old

▲ Young

REACTOME_SELENOAMINO_ACID_METABOLISM

D0_sCs_Down.D2_sCs_Down.D4_sCs_Up.D7_sCs_Up

