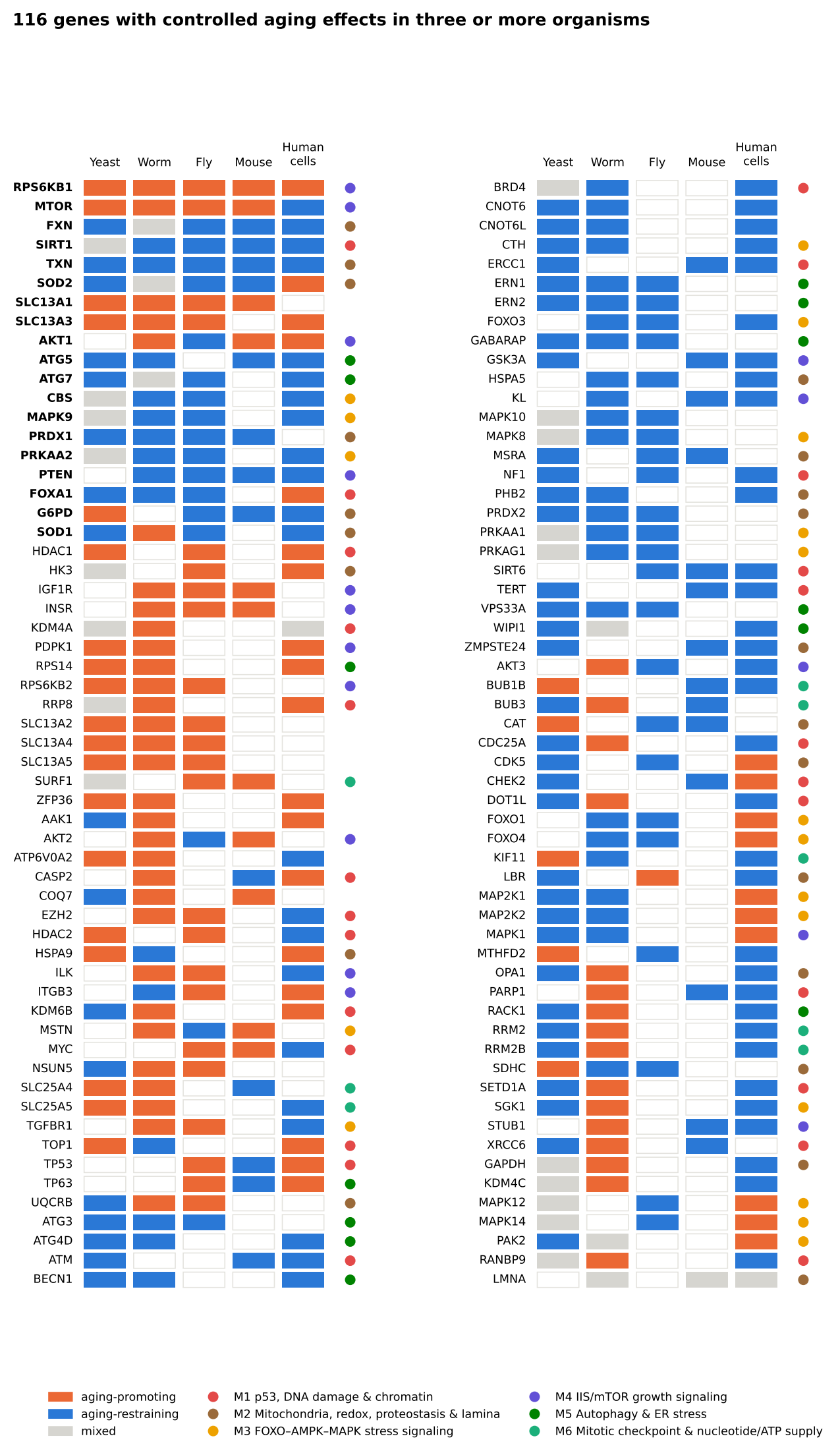

116 genes with controlled aging effects in three or more organisms
Yeast
Worm
Fly
Mouse
Human cells
RPS6KB1
MTOR
FXN
SIRT1
TXN
SOD2
SLC13A1
SLC13A3
AKT1
ATG5
ATG7
CBS
MAPK9
PRDX1
PRKAA2
PTEN
FOXA1
G6PD
SOD1
HDAC1
HK3
IGF1R
INSR
KDM4A
PDPK1
RPS14
RPS6KB2
RRP8
SLC13A2
SLC13A4
SLC13A5
SURF1
ZFP36
AAK1
AKT2
ATP6V0A2
CASP2
COQ7
EZH2
HDAC2
HSPA9
ILK
ITGB3
KDM6B
MSTN
MYC
NSUN5
SLC25A4
SLC25A5
TGFBR1
TOP1
TP53
TP63
UQCRB
ATG3
ATG4D
ATM
BECN1
BRD4
CNOT6
CNOT6L
CTH
ERCC1
ERN1
ERN2
FOXO3
GABARAP
GSK3A
HSPA5
KL
MAPK10
MAPK8
MSRA
NF1
PHB2
PRDX2
PRKAA1
PRKAG1
SIRT6
TERT
VPS33A
WIPI1
ZMPSTE24
AKT3
BUB1B
BUB3
CAT
CDC25A
CDK5
CHEK2
DOT1L
FOXO1
FOXO4
KIF11
LBR
MAP2K1
MAP2K2
MAPK1
MTHFD2
OPA1
PARP1
RACK1
RRM2
RRM2B
SDHC
SETD1A
SGK1
STUB1
XRCC6
GAPDH
KDM4C
MAPK12
MAPK14
PAK2
RANBP9
LMNA
aging-promoting
aging-restraining
mixed
M1 p53, DNA damage & chromatin
M2 Mitochondria, redox, proteostasis & lamina
M3 FOXO–AMPK–MAPK stress signaling
M4 IIS/mTOR growth signaling
M5 Autophagy & ER stress
M6 Mitotic checkpoint & nucleotide/ATP supply