

Supporting information for

LFQ-Analyst: An easy-to-use interactive web-platform to analyze and visualize label-free proteomics data preprocessed with MaxQuant

Anup D. Shah^{1,2}, Robert J.A. Goode¹, Cheng Huang¹, David R. Powell² and Ralf B. Schittenhelm¹

¹Monash Proteomics & Metabolomics Facility, Department of Biochemistry and Molecular Biology, Biomedicine Discovery Institute, Monash University, Clayton, Victoria 3800, Australia

²Monash Bioinformatics Platform, Biomedicine Discovery Institute, Monash University, Clayton, Victoria 3800, Australia

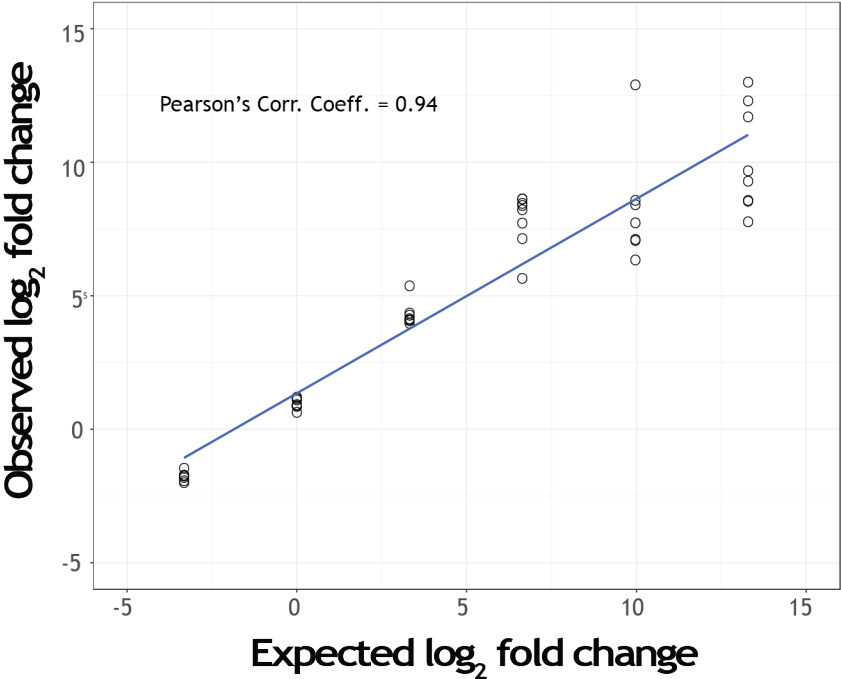
Supplementary figure S1. Scatter plots

Supplementary figure S2. Protein intensity plots

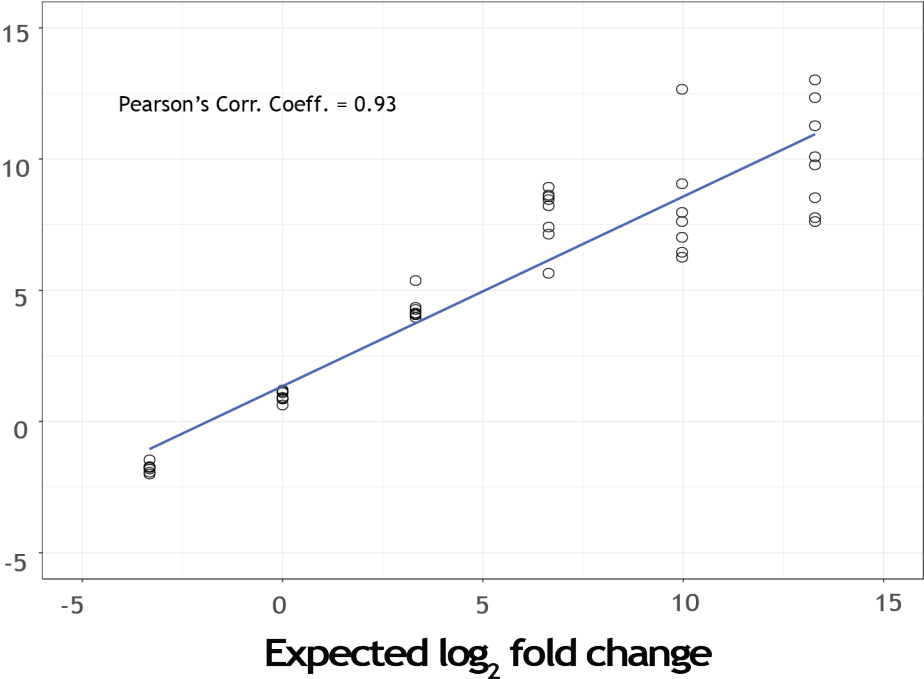
Supplementary figure S3. Protein intensity plots

Supplementary figure S1. Scatter plots comparing the calculated/observed and the expected log2 fold changes of the UPS1 and UPS2 standard proteins using either *LFQ-Analyst* or Perseus (based on the dataset PXD000279 provided to PRIDE). Each circle represents a UPS1/UPS2 standard protein and the linear regression curves are shown in blue.

LFQ-Analyst



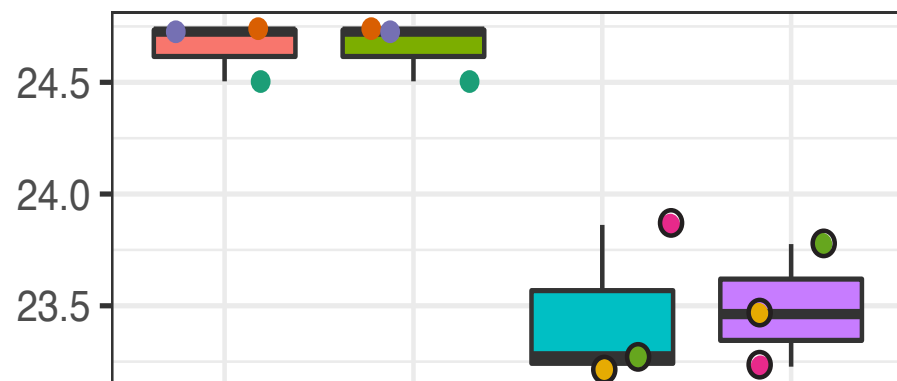
Perseus



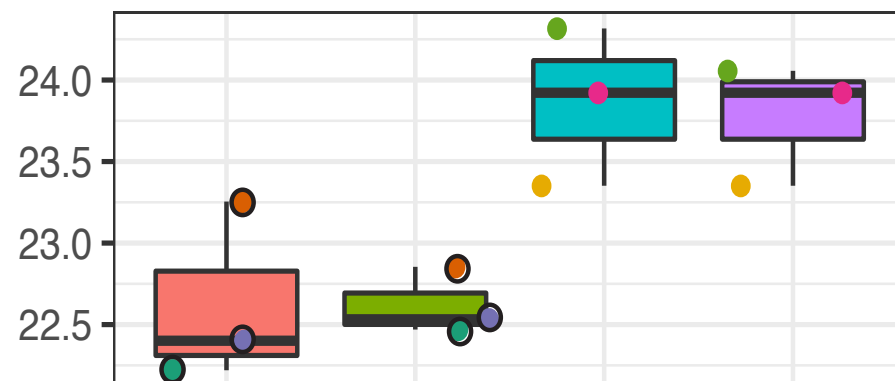
Supplementary figure S2. Protein intensity plots of those 12 proteins that have been only identified by Perseus as being differentially regulated (based on the dataset PXD002057 provided to PRIDE). Each plot contains four boxplots with individual replicates represented as dots and a black line surrounding a dot indicates that the value for this particular replicate had been imputed. The y-axes represent log₂ LFQ intensity values. The four boxplots from left to right are: (i) the parental SKBR3 cell line analyzed with LFQ-Analyst (*red boxplot*), (ii) the parental SKBR3 cell line analyzed with Perseus (*green boxplot*), (iii) the HER2-resistant cell line analyzed with LFQ-Analyst (*cyan boxplot*) and (iv) the HER2-resistant cell line analyzed with Perseus (*purple boxplot*).

Supplementary Figure S2

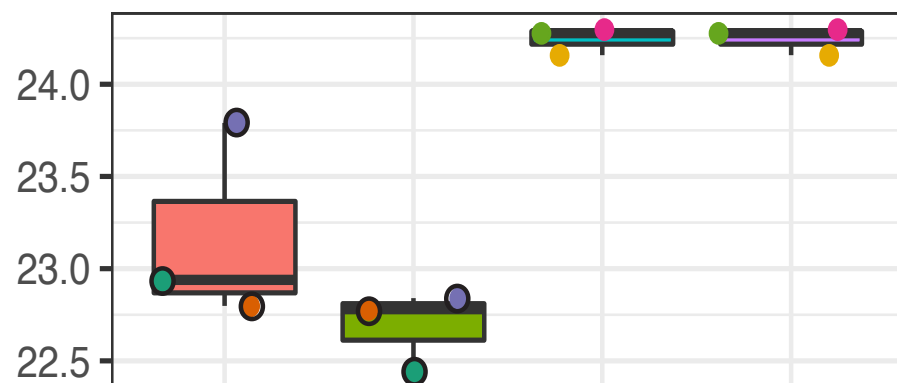
HSPA4L



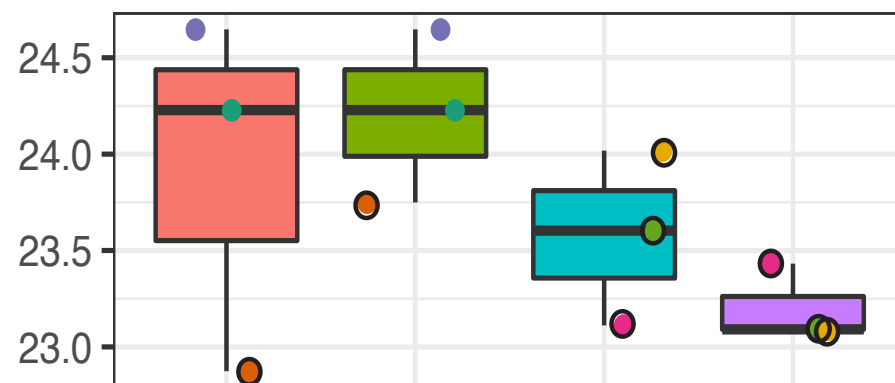
RRM1



BAG3

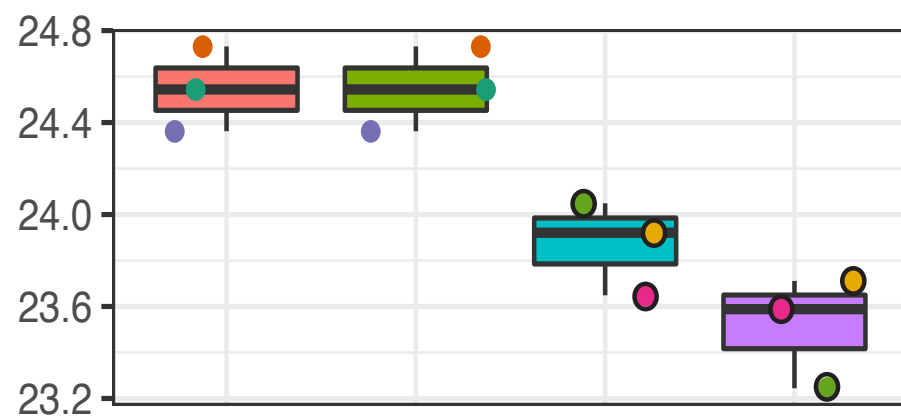


GSTO1

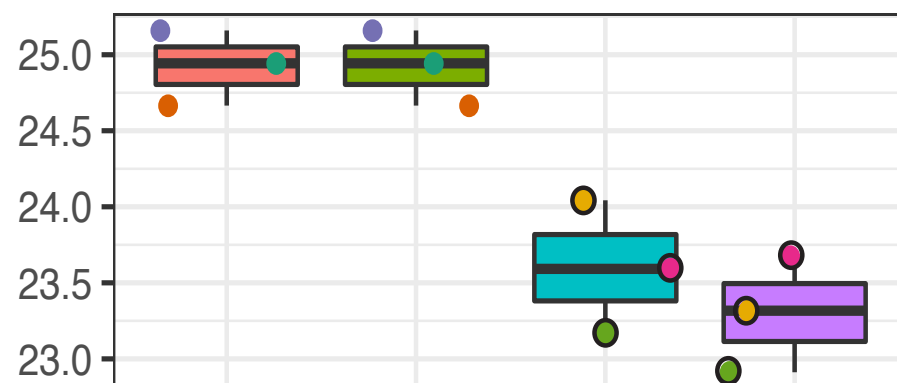


Supplementary Figure S2

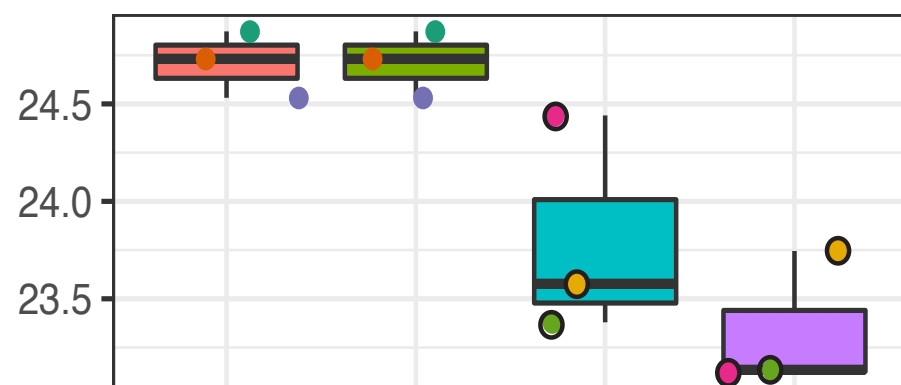
PPP1R14B



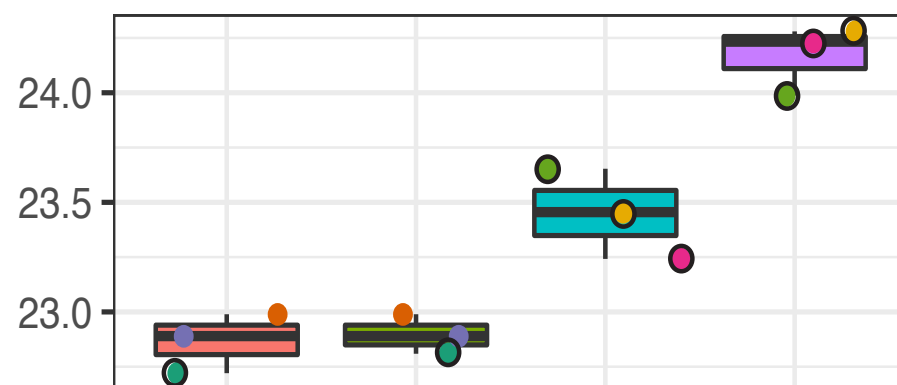
ACAT2



DDX27

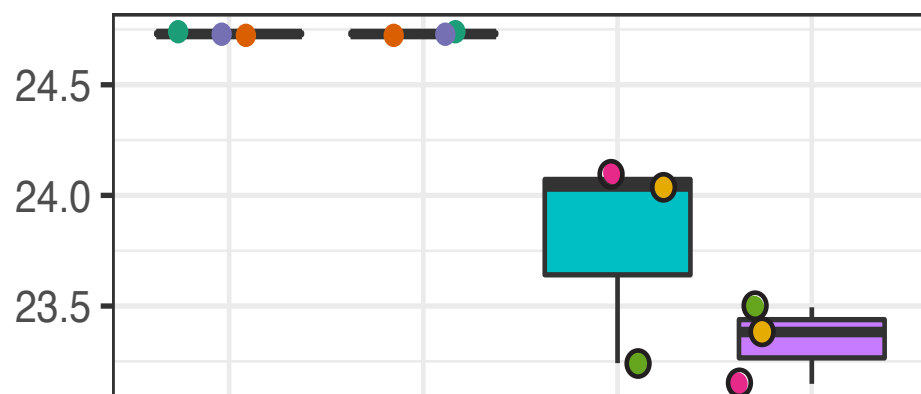


UBA5

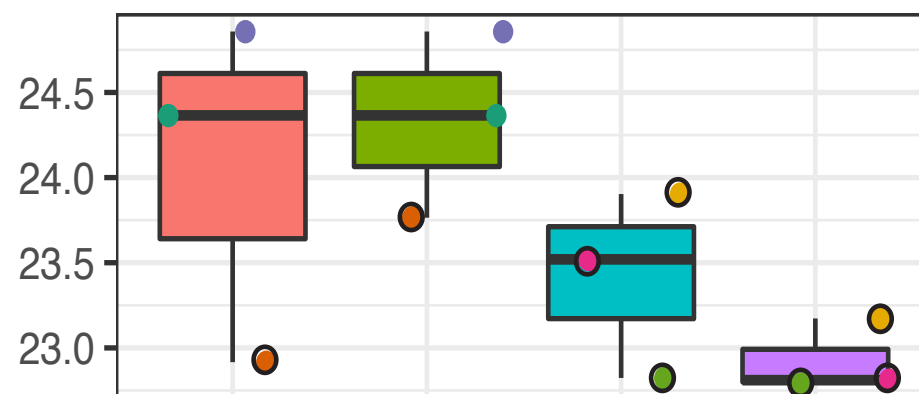


Supplementary Figure S2

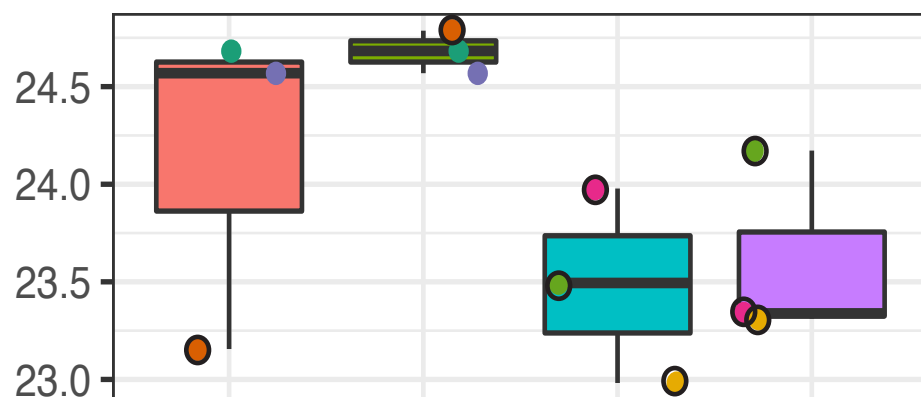
PPAN



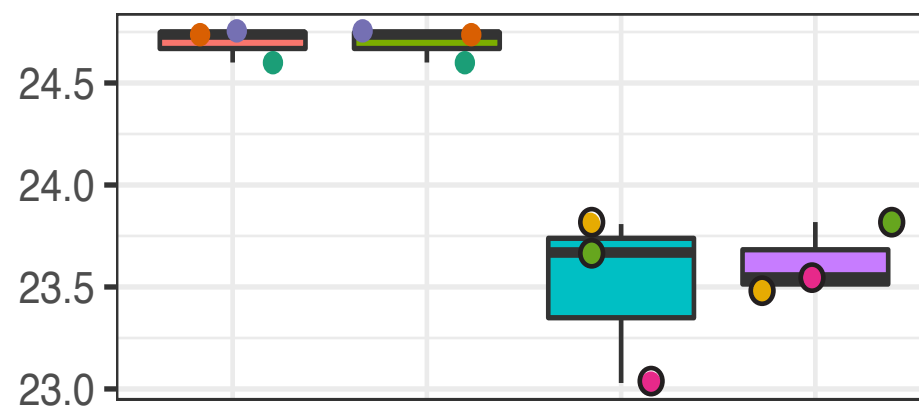
TJP2



UGGT1



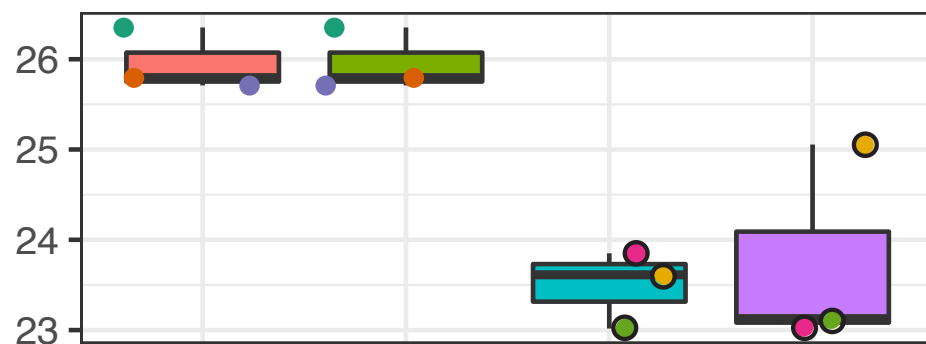
EIF2B4



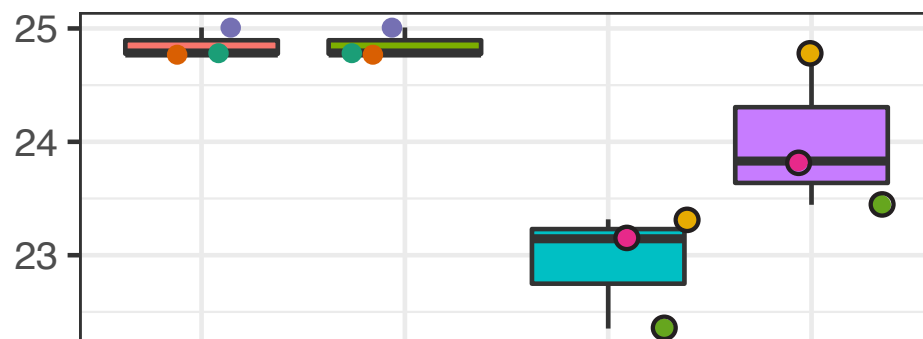
Supplementary figure S3. Protein intensity plots of those 64 proteins that have been only identified by LFQ-Analyst as being differentially regulated (based on the dataset PXD002057 provided to PRIDE). Each plot contains four boxplots with individual replicates represented as dots and a black line surrounding a dot indicates that the value for this particular replicate had been imputed. The y-axes represent log₂ LFQ intensity values. The four boxplots from left to right are: (i) the parental SKBR3 cell line analyzed with LFQ-Analyst (*red boxplot*), (ii) the parental SKBR3 cell line analyzed with Perseus (*green boxplot*), (iii) the HER2-resistant cell line analyzed with LFQ-Analyst (*cyan boxplot*) and (iv) the HER2-resistant cell line analyzed with Perseus (*purple boxplot*).

Supplementary Figure S3

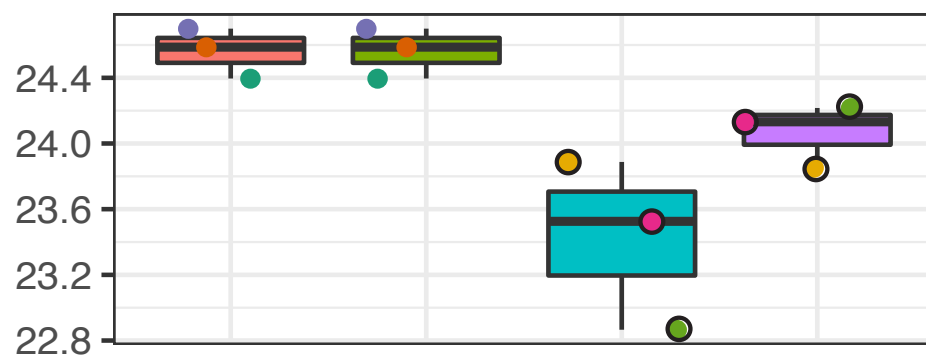
NOP56



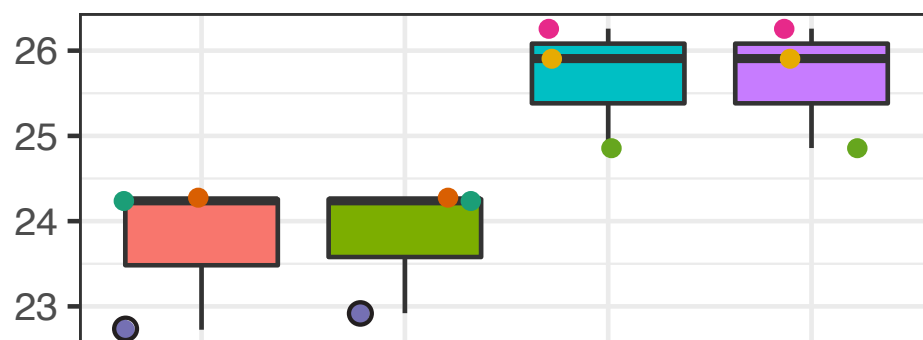
ZNF207



COPE



UGDH

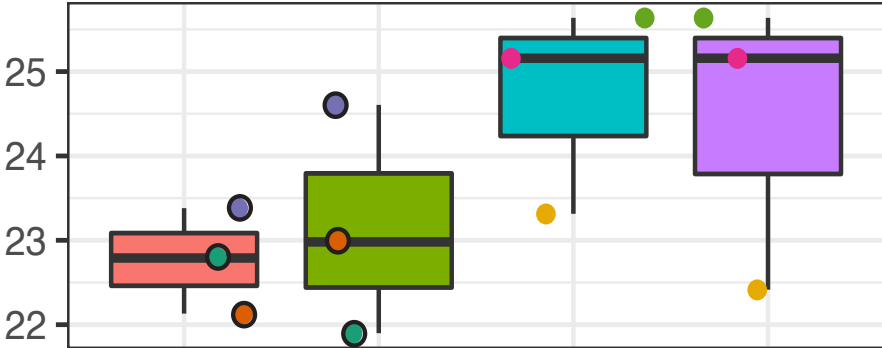


Supplementary Figure S3

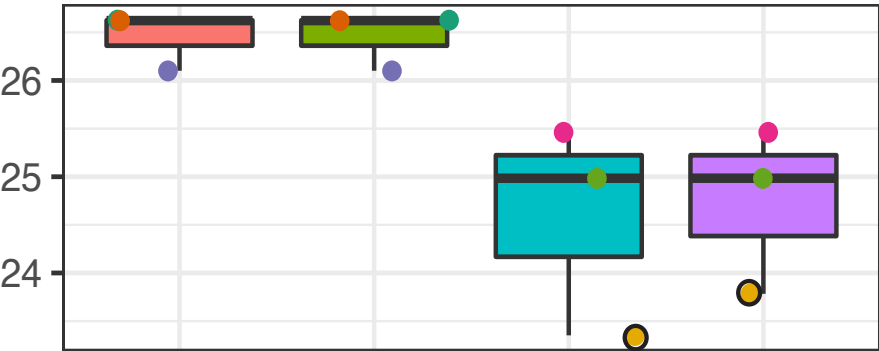
NDUFA10



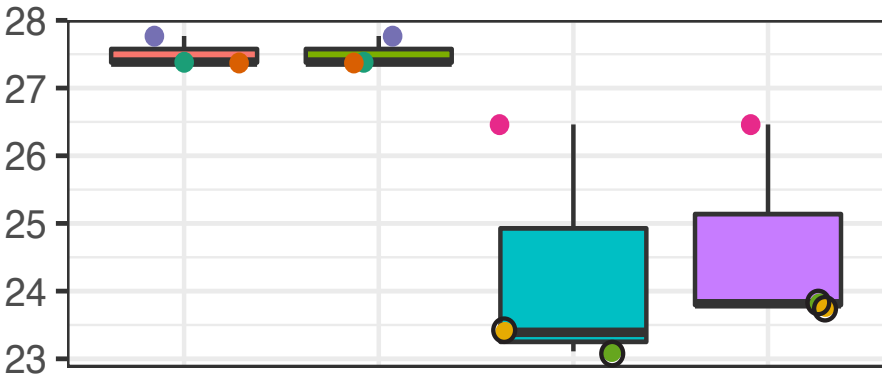
GNAI2



ACSL3

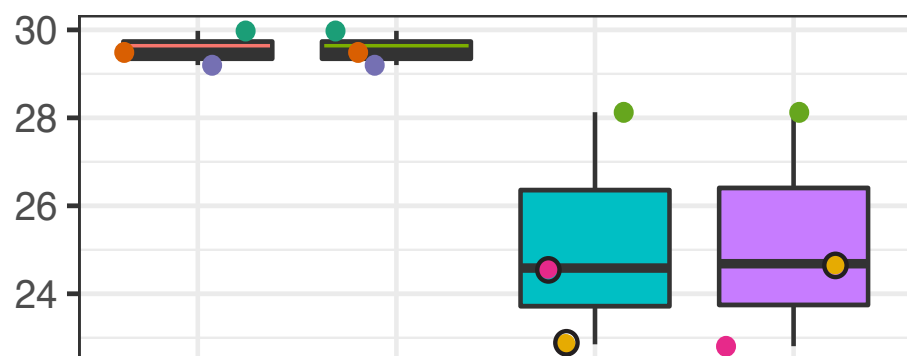


CTSD

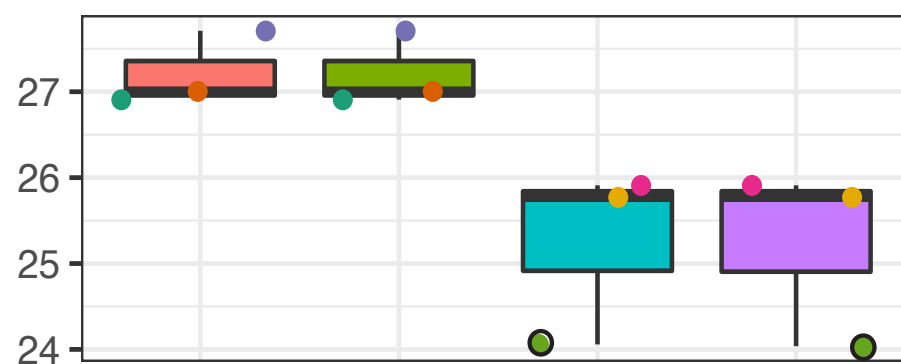


Supplementary Figure S3

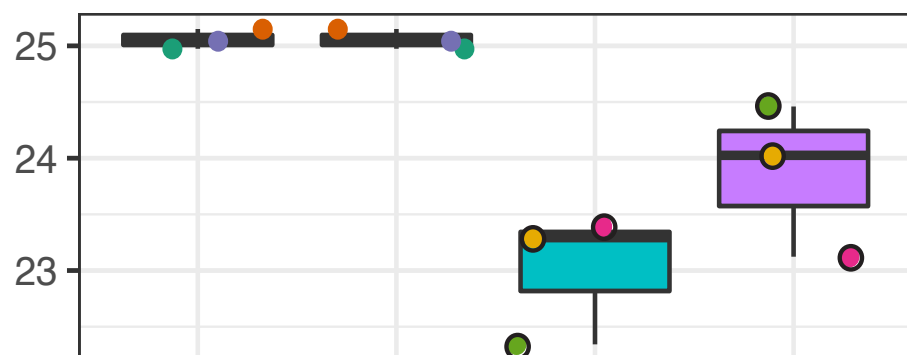
PFN1



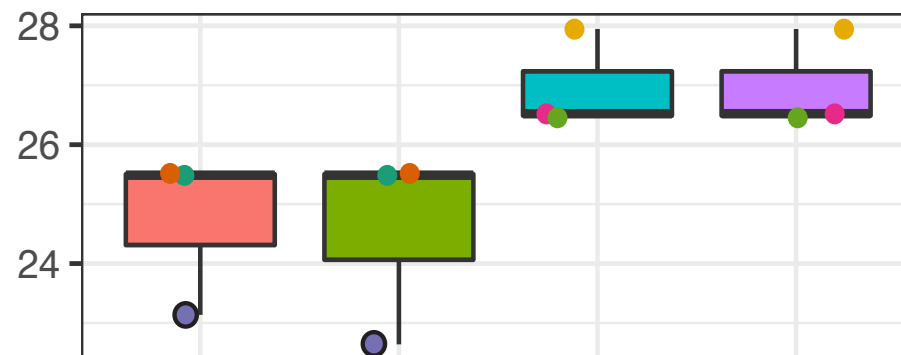
DLD



PFKM

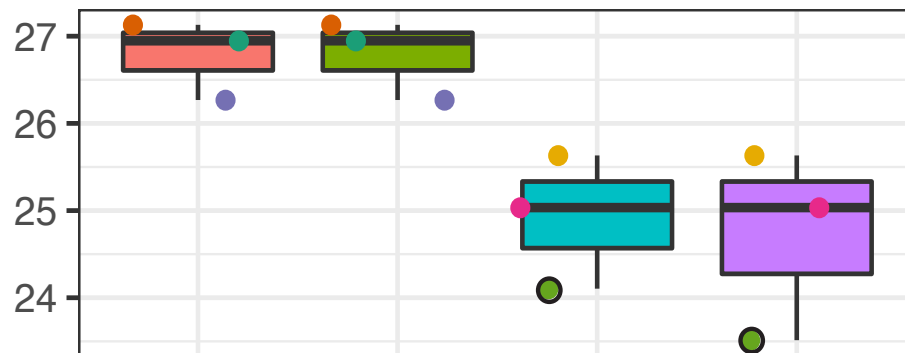


TPT1

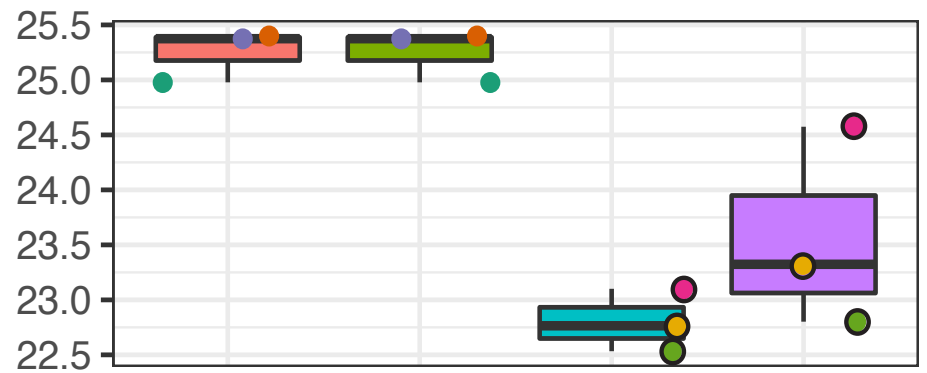


Supplementary Figure S3

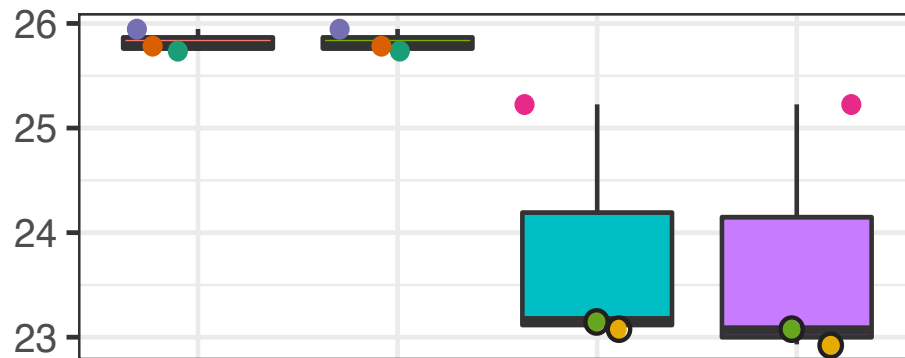
GSPT1



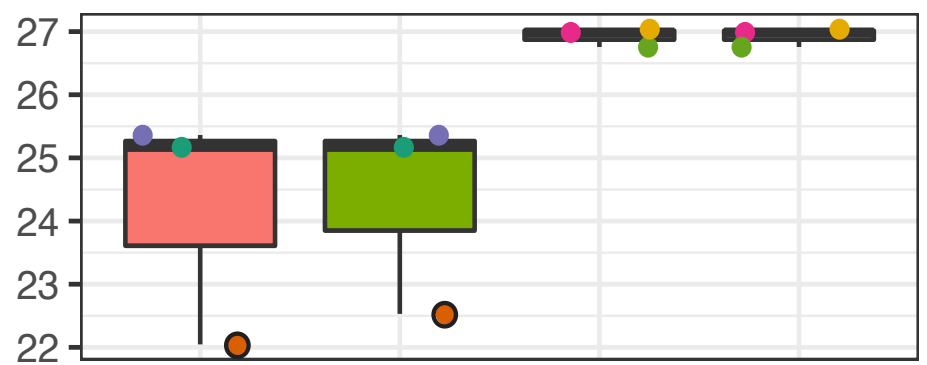
TCEA1



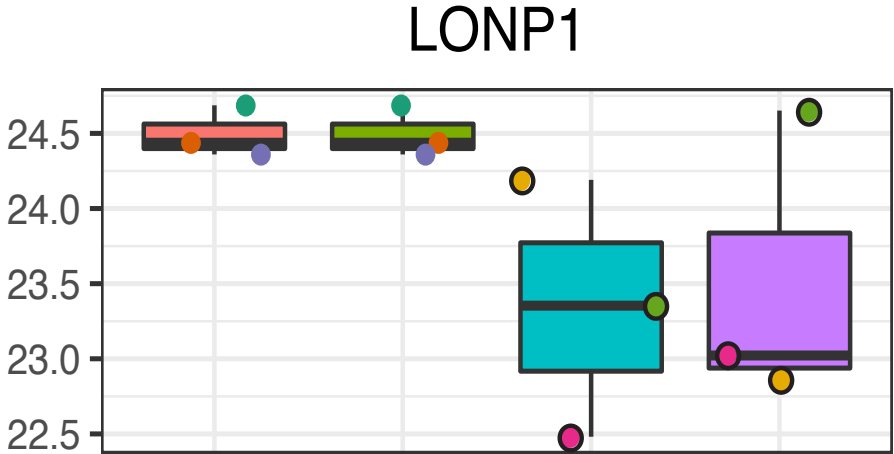
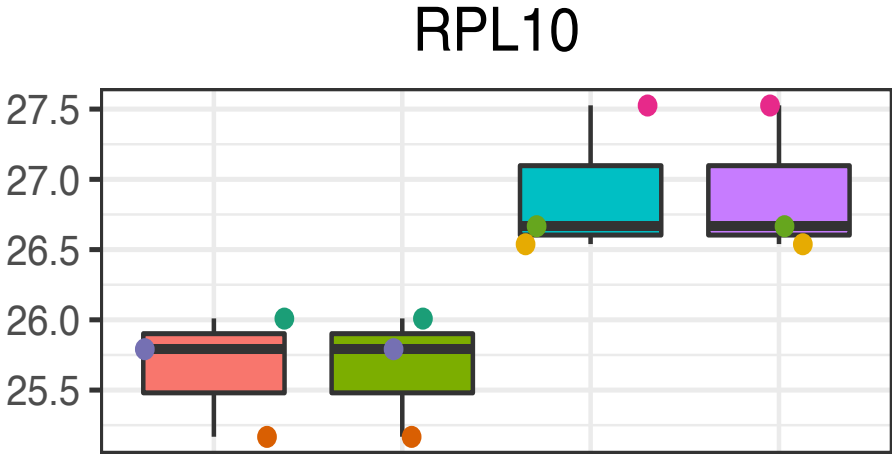
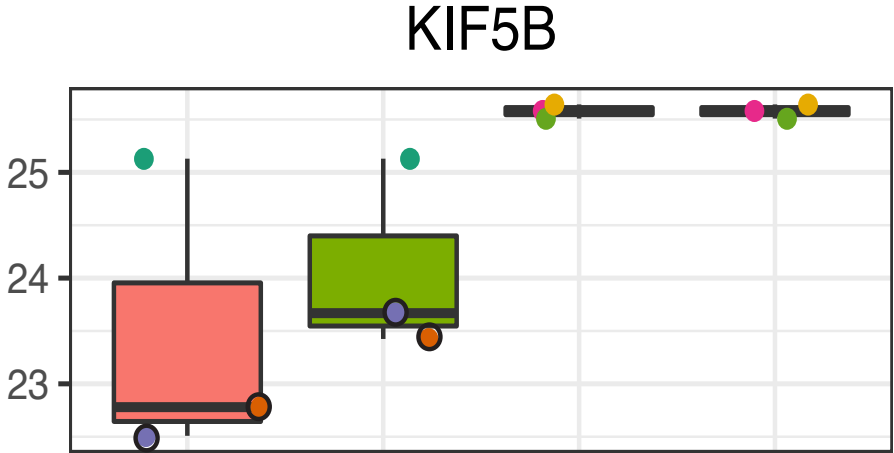
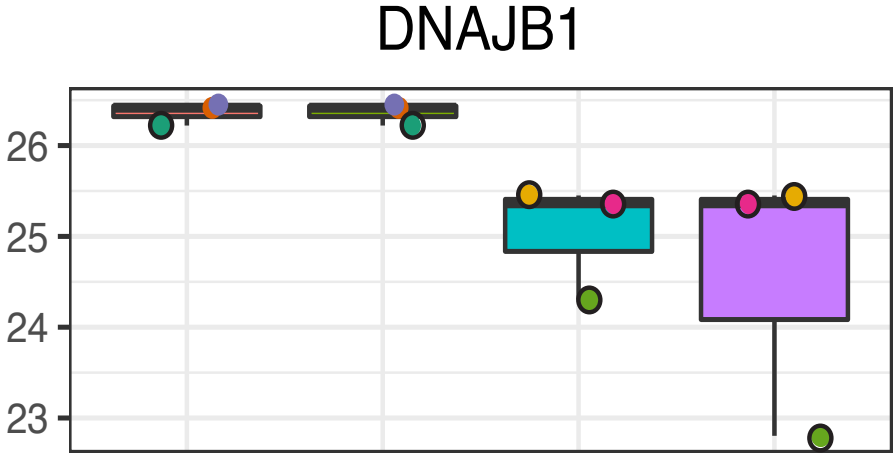
POR



MCM3

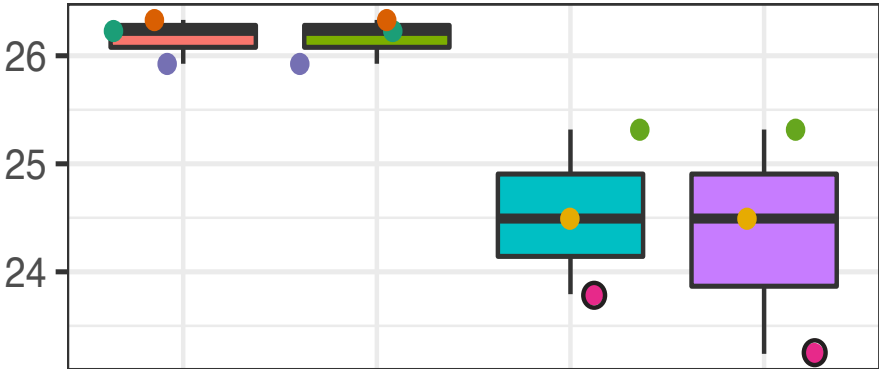


Supplementary Figure S3

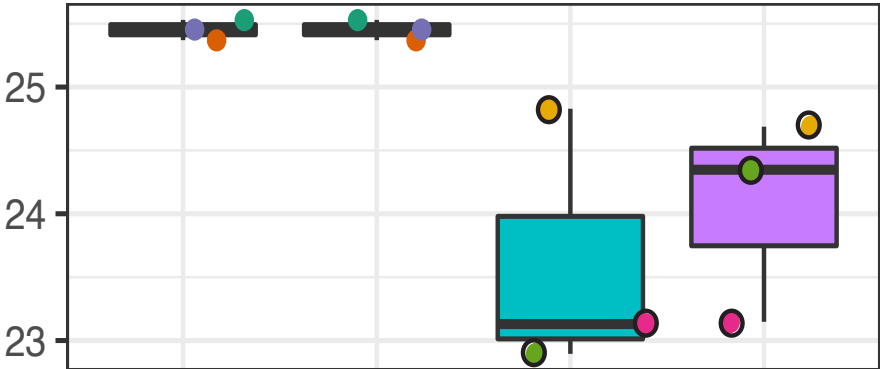


Supplementary Figure S3

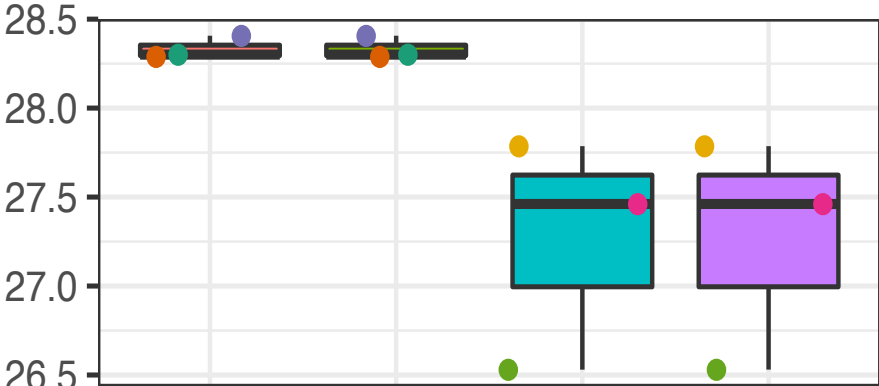
DLST



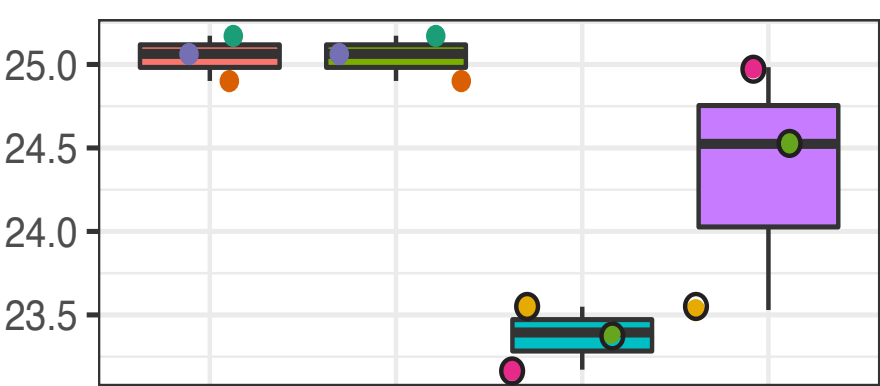
ATP6V1A



RBMX

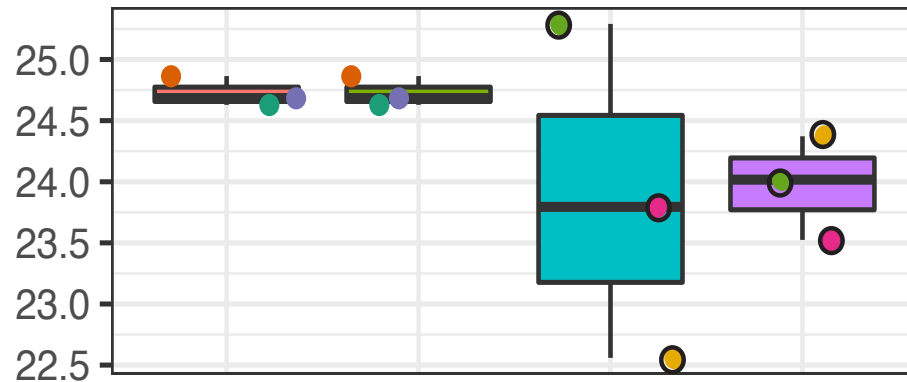


SKIV2L2

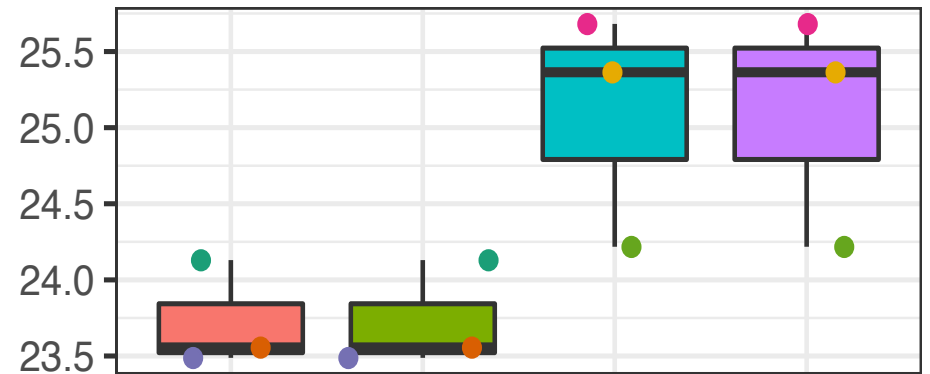


Supplementary Figure S3

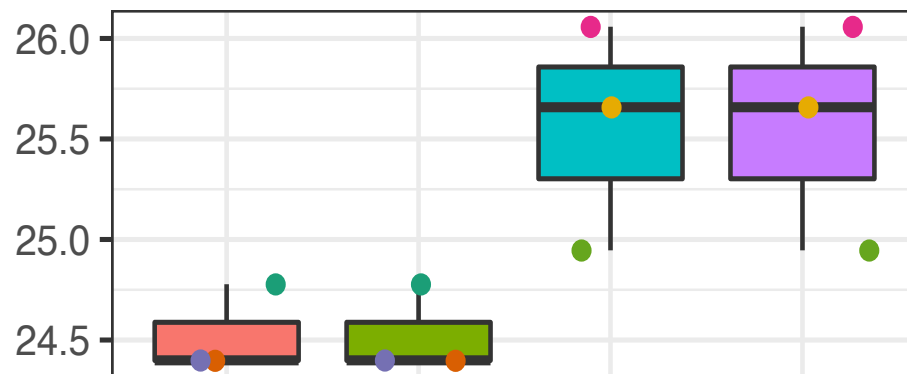
GPD2



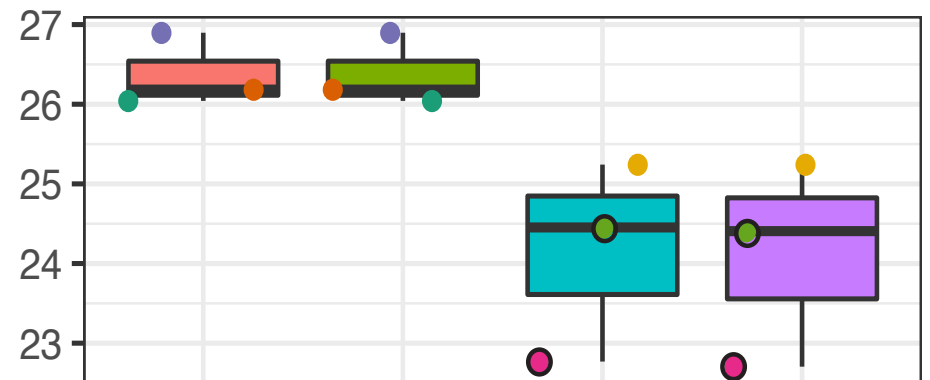
PREP



PSMC4

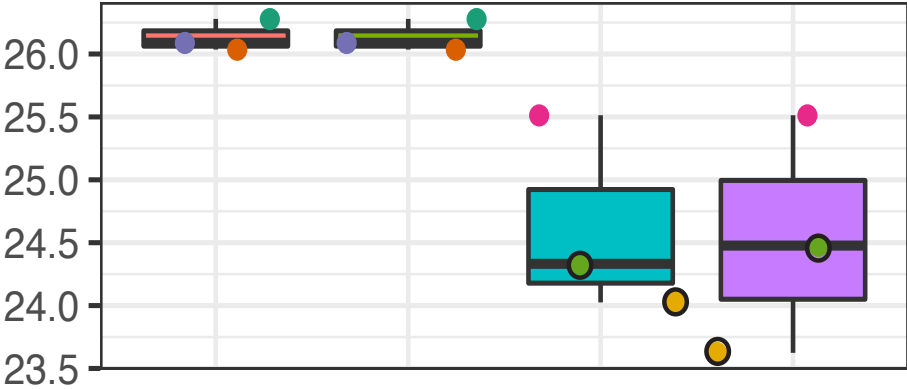


NASP

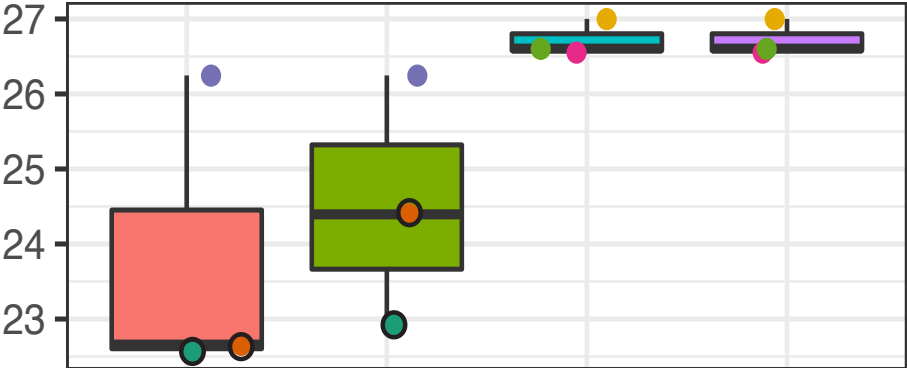


Supplementary Figure S3

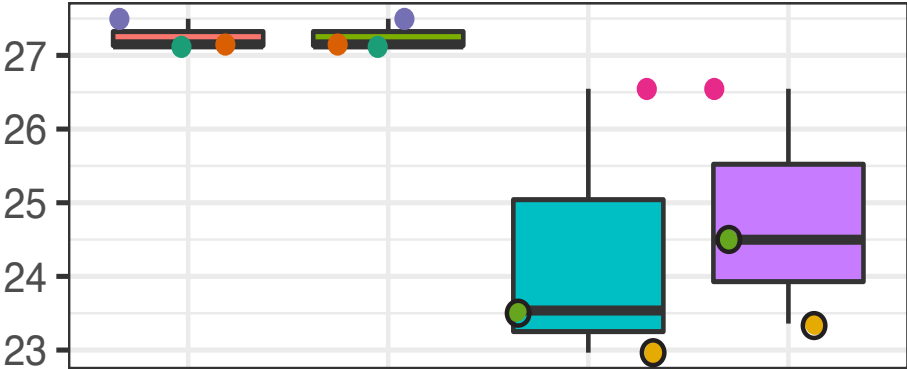
RANBP2



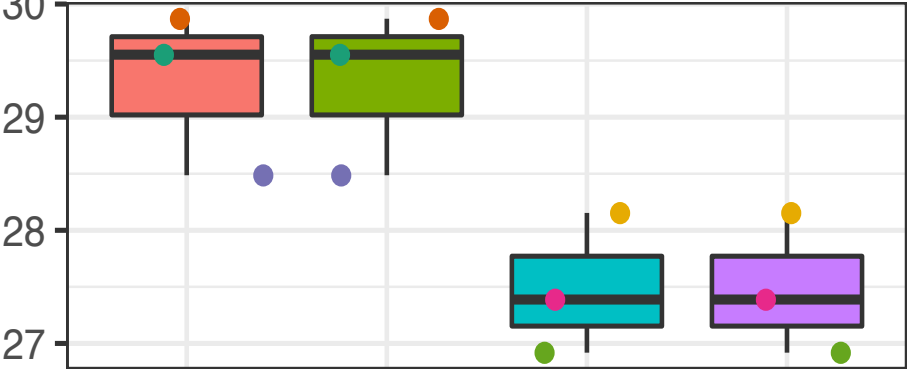
MTPN



RARS

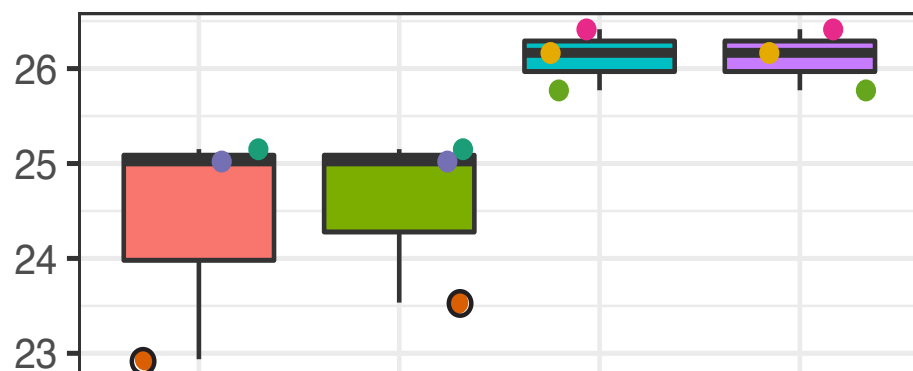


DSTN

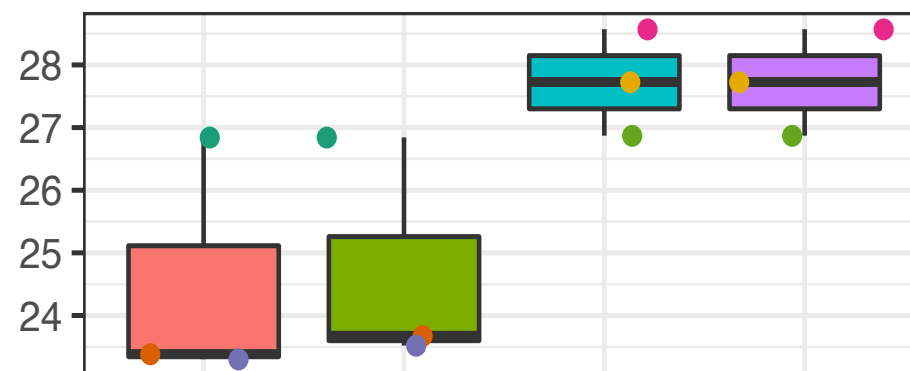


Supplementary Figure S3

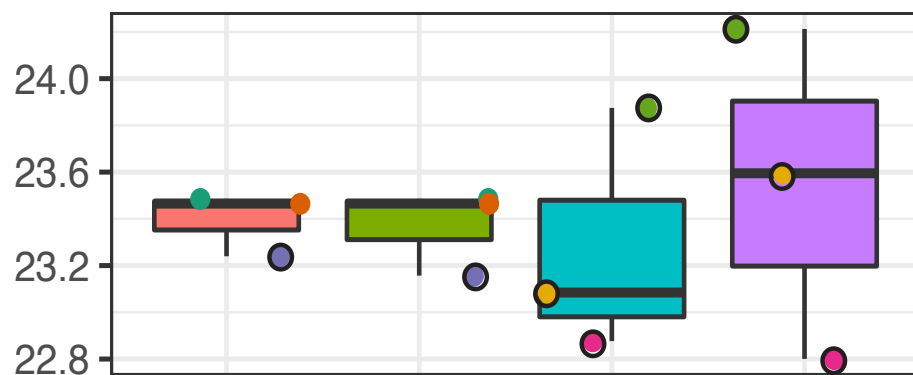
UBE2K



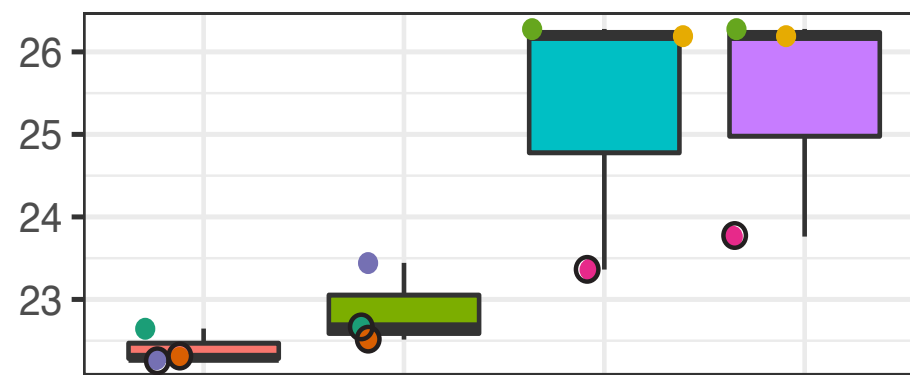
RPS15



STXBP1

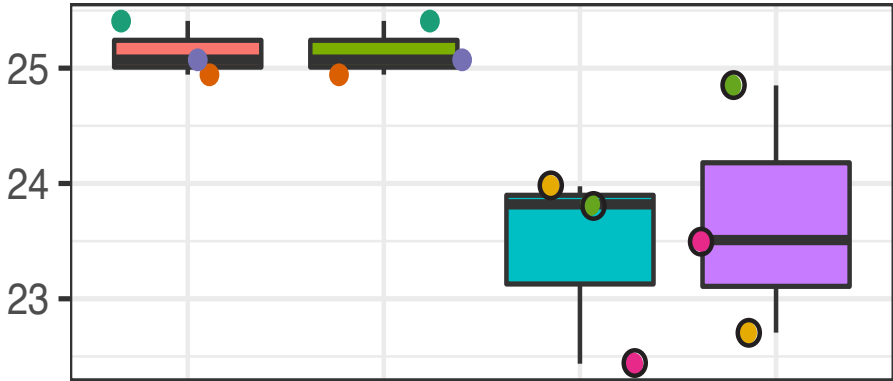


SKP1

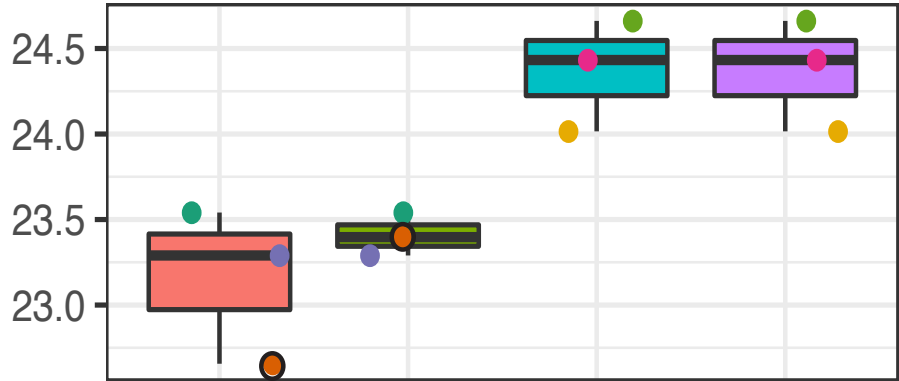


Supplementary Figure S3

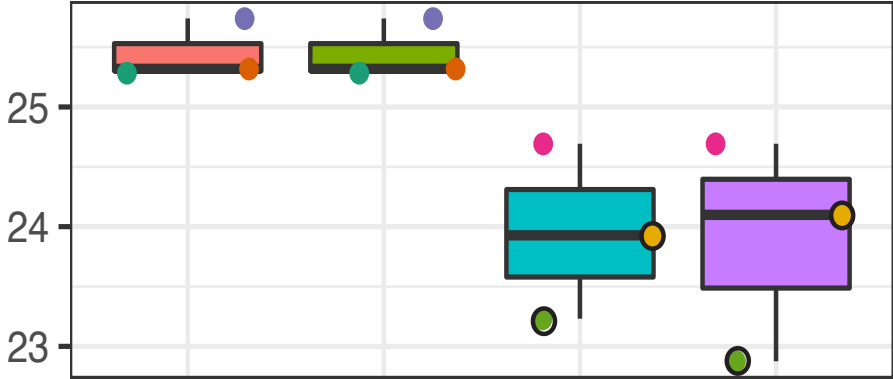
OGDH



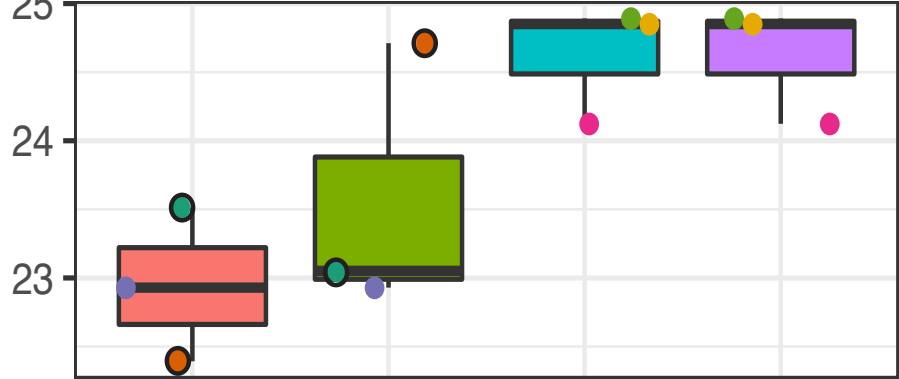
PICALM



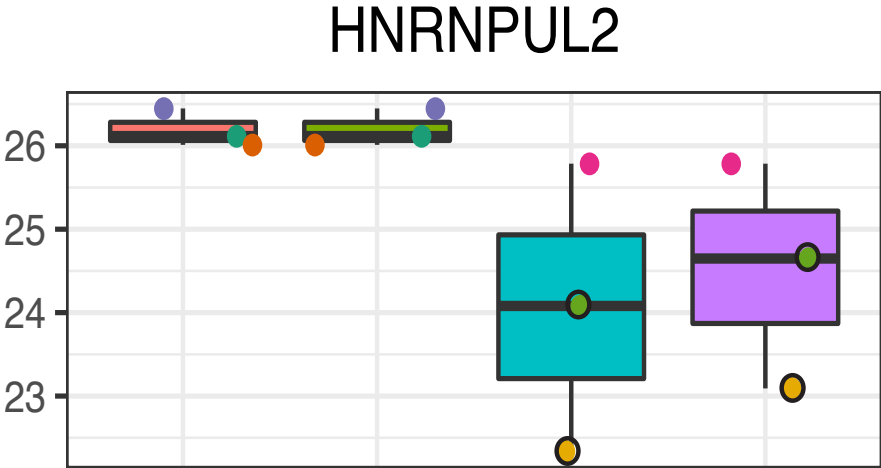
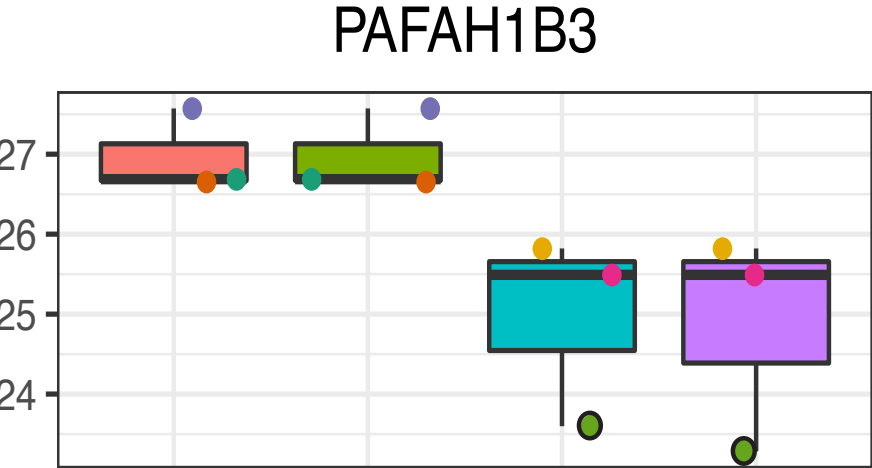
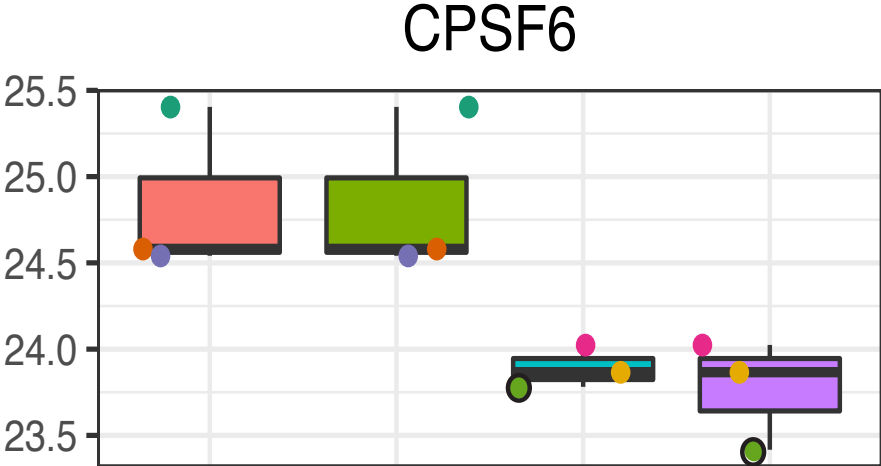
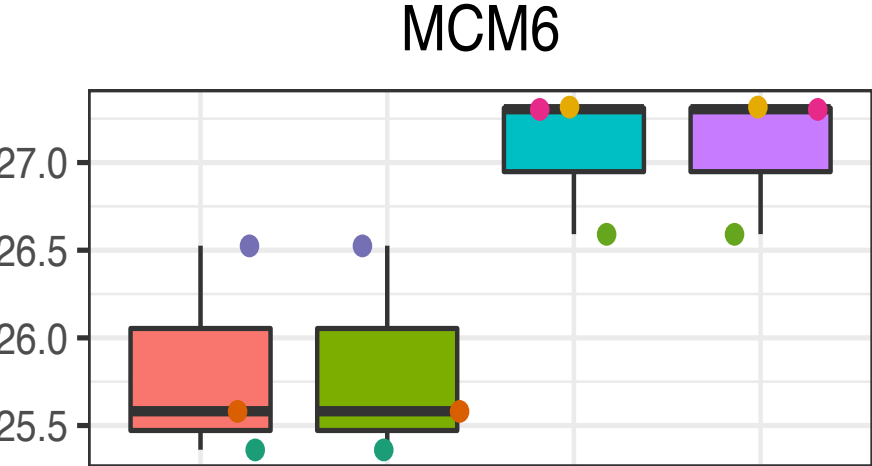
NSUN2



PIN1

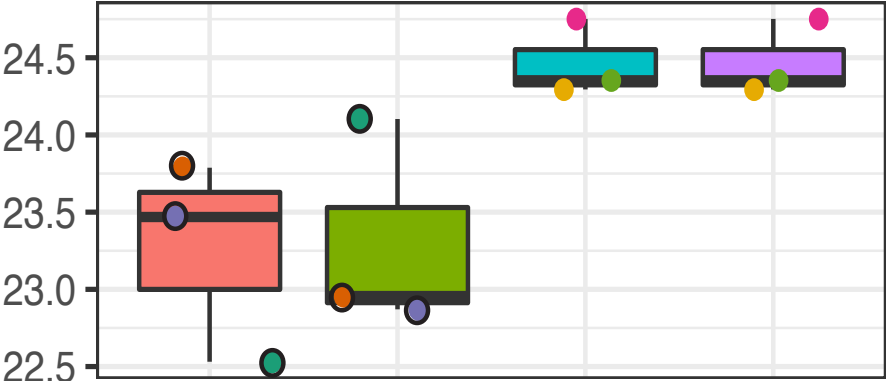


Supplementary Figure S3

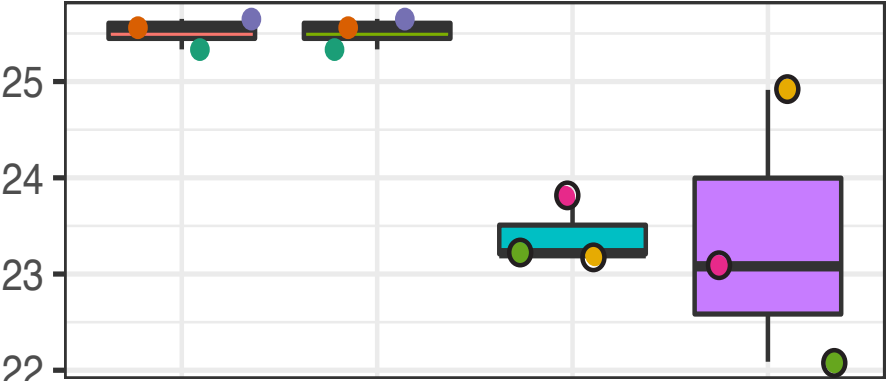


Supplementary Figure S3

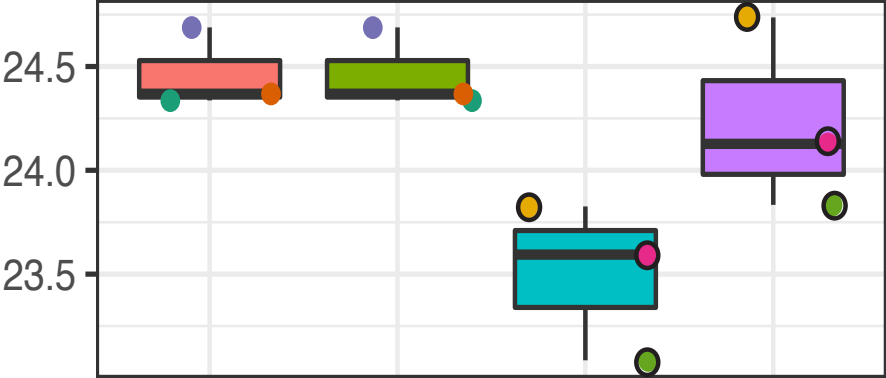
UAP1L1



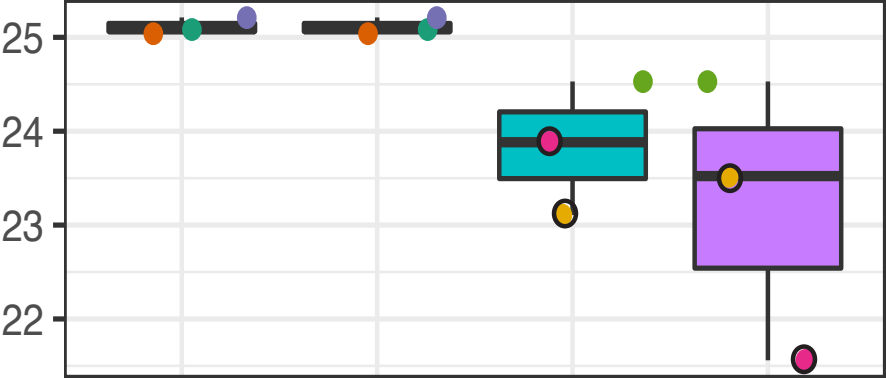
COA6



HSD17B12

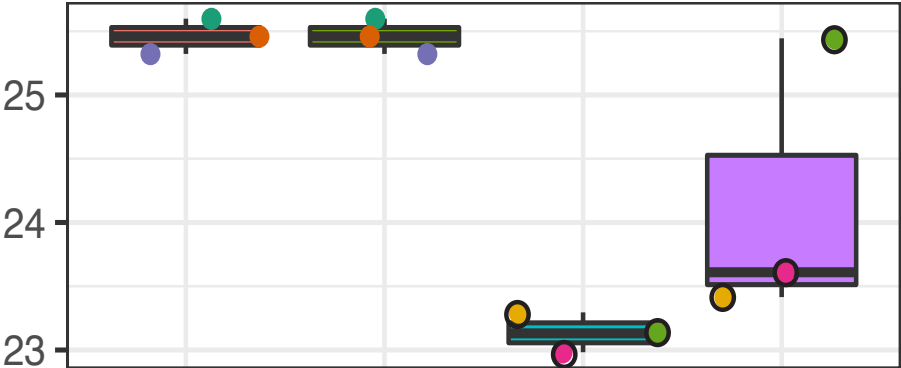


ATAD2

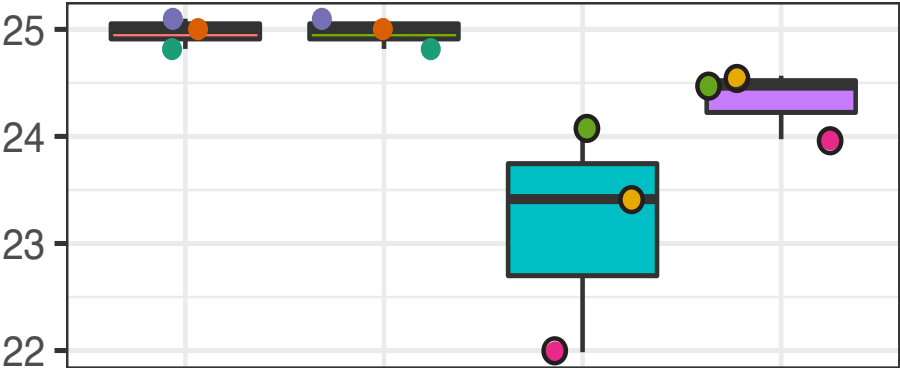


Supplementary Figure S3

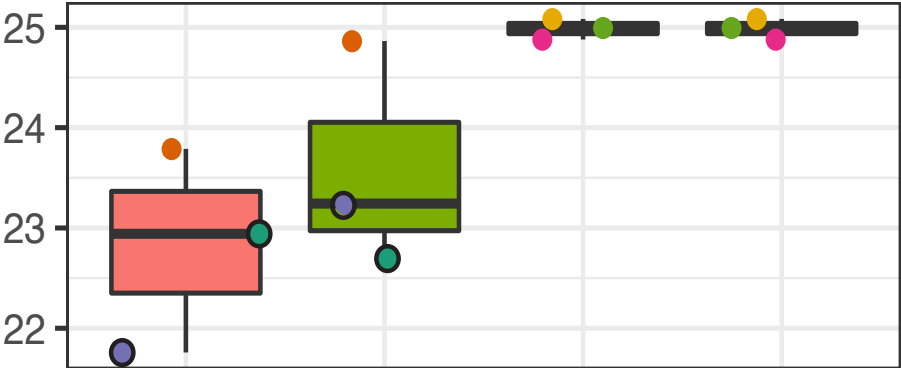
FAM83H



PELP1



COPS6

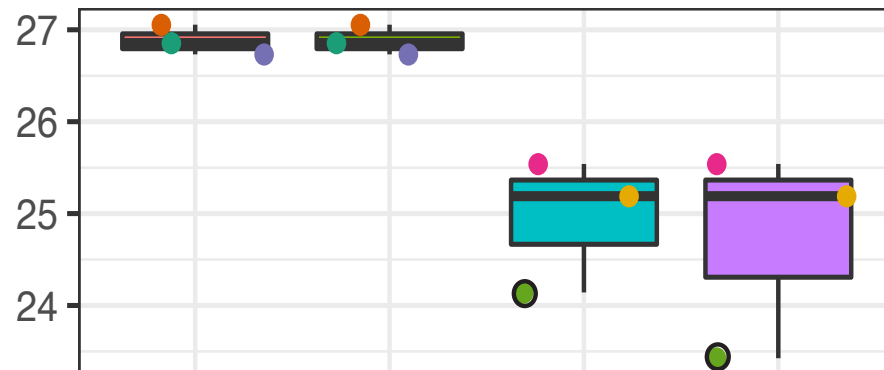


NUP37

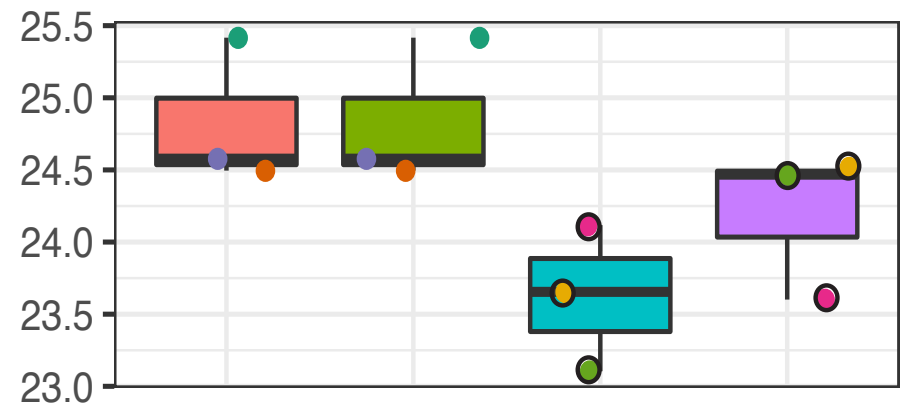


Supplementary Figure S3

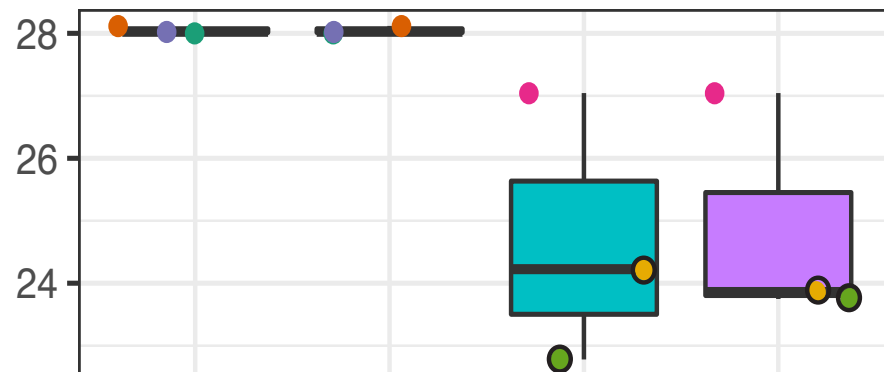
PSPC1



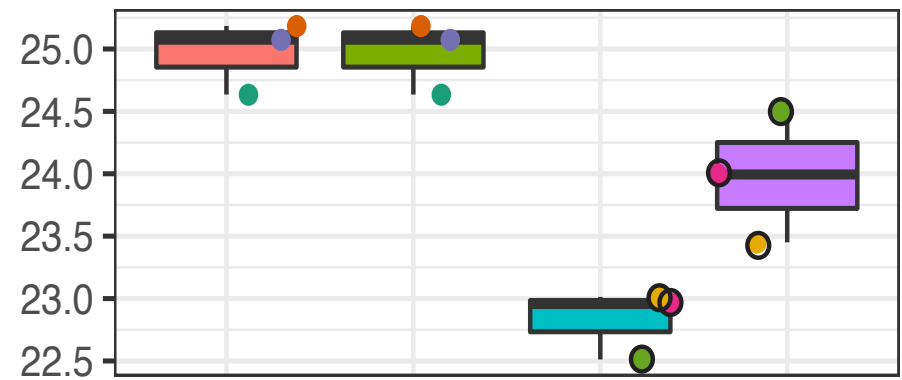
TUBA1C



CNDP2

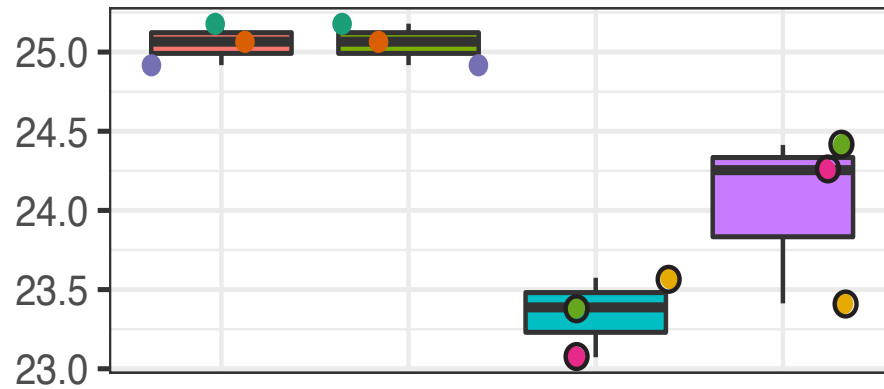


WIBG

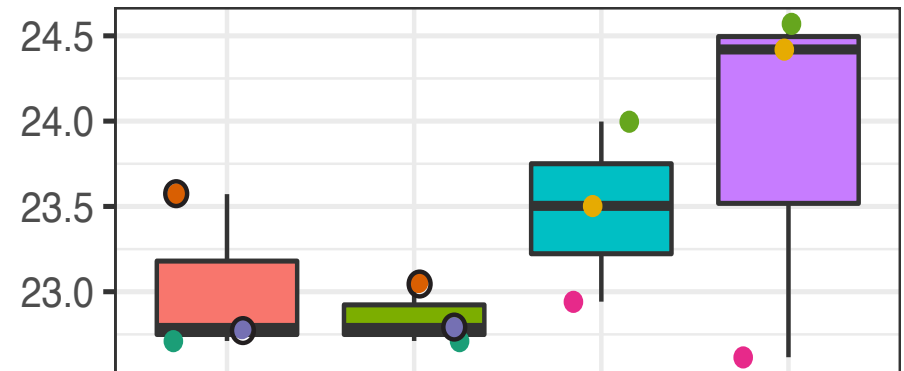


Supplementary Figure S3

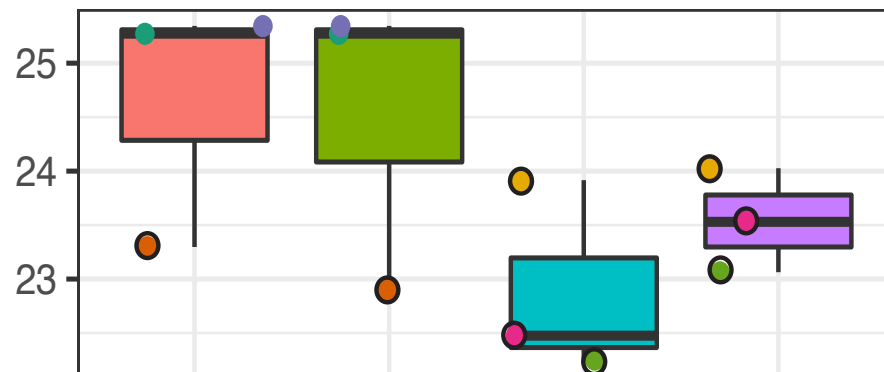
TACO1



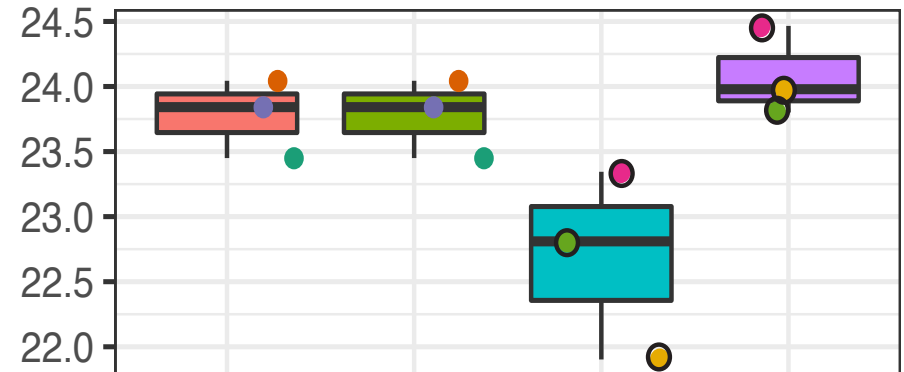
SCAF1



HNRNPUL1

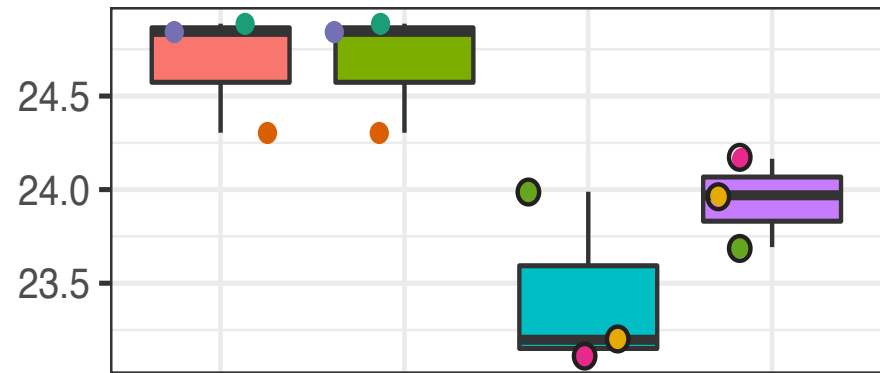


XPO5

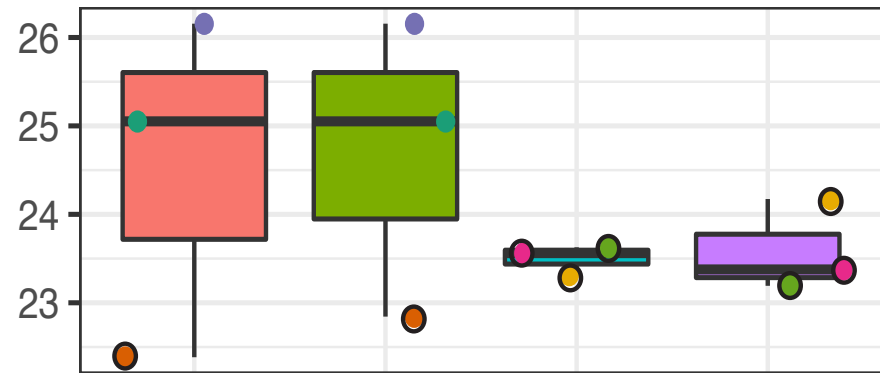


Supplementary Figure S3

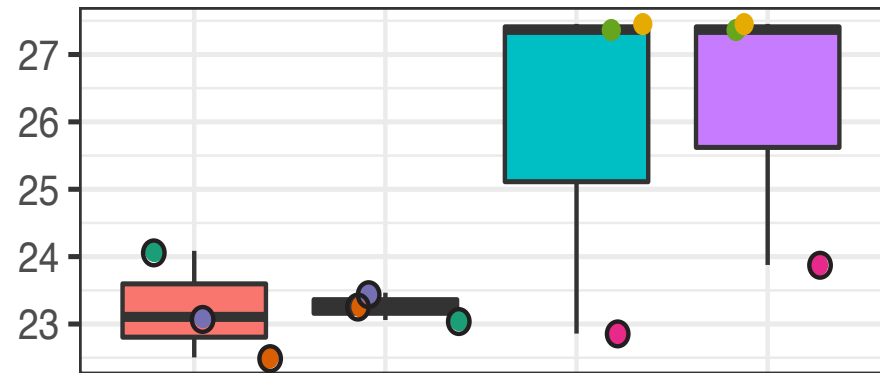
TRMT112



GSTK1



MACF1



THRAP3

