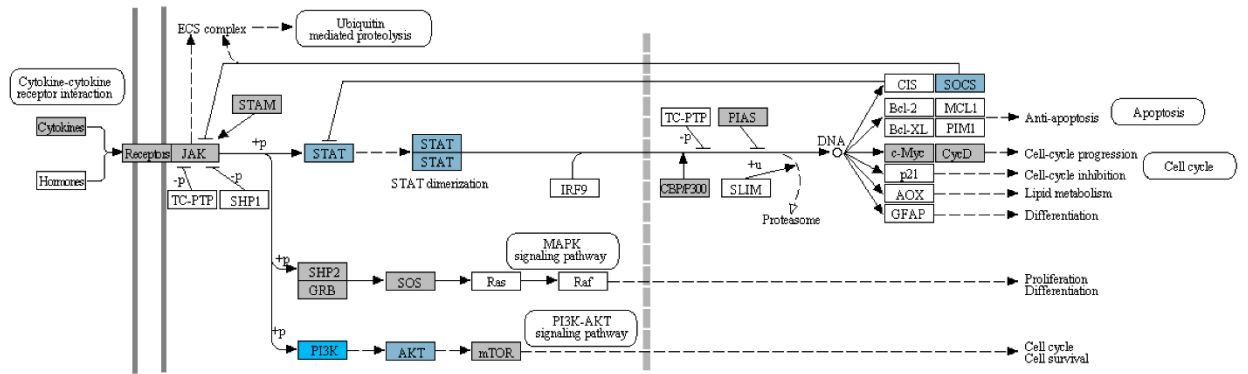
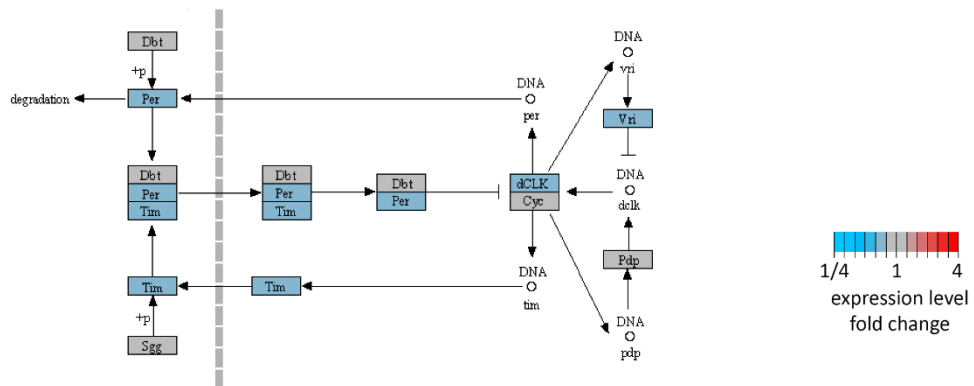


Additional file 1

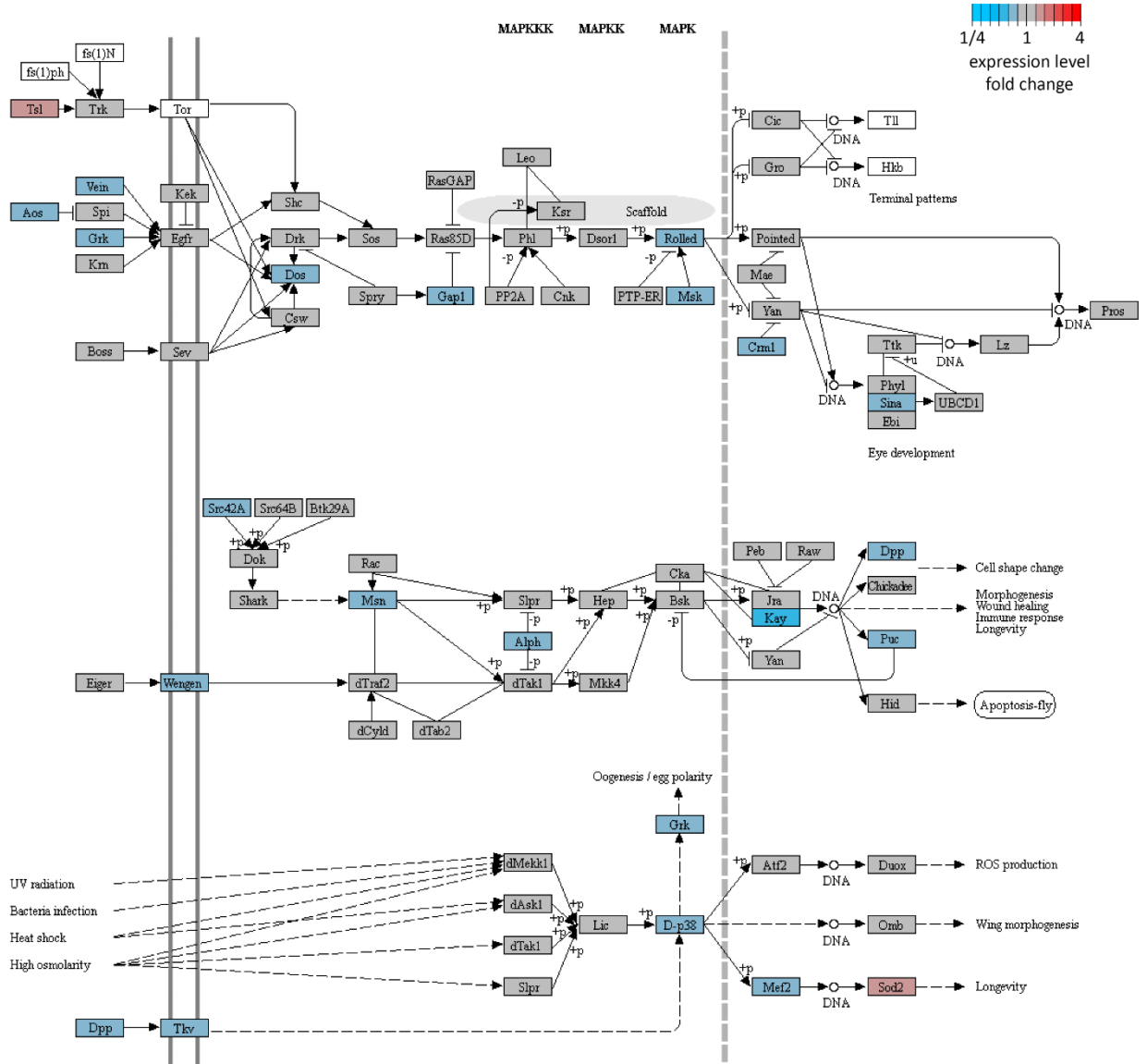
Jak-STAT signaling pathway



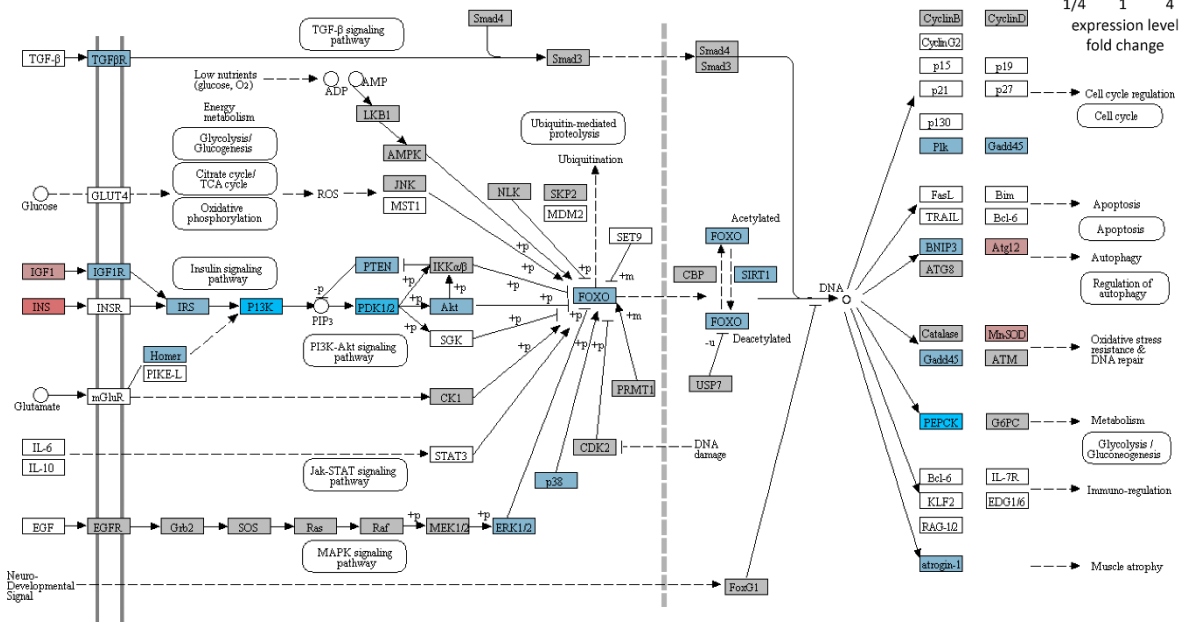
Circadian rhythm



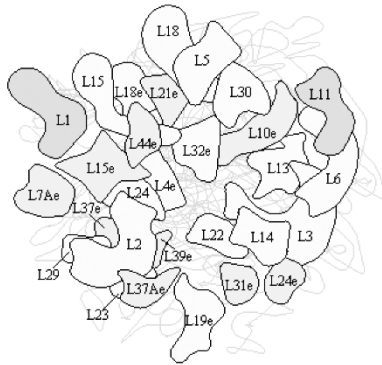
MAPK signaling pathway



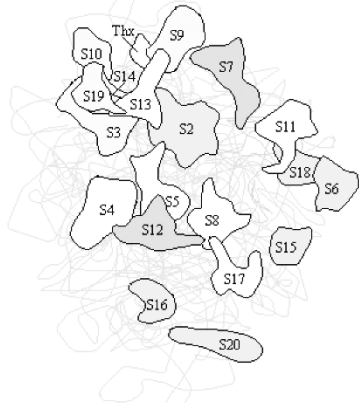
FOXO signaling pathway



Ribosome biogenesis



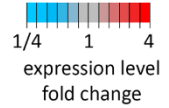
Large subunit (*Haloarcula marismortui*)



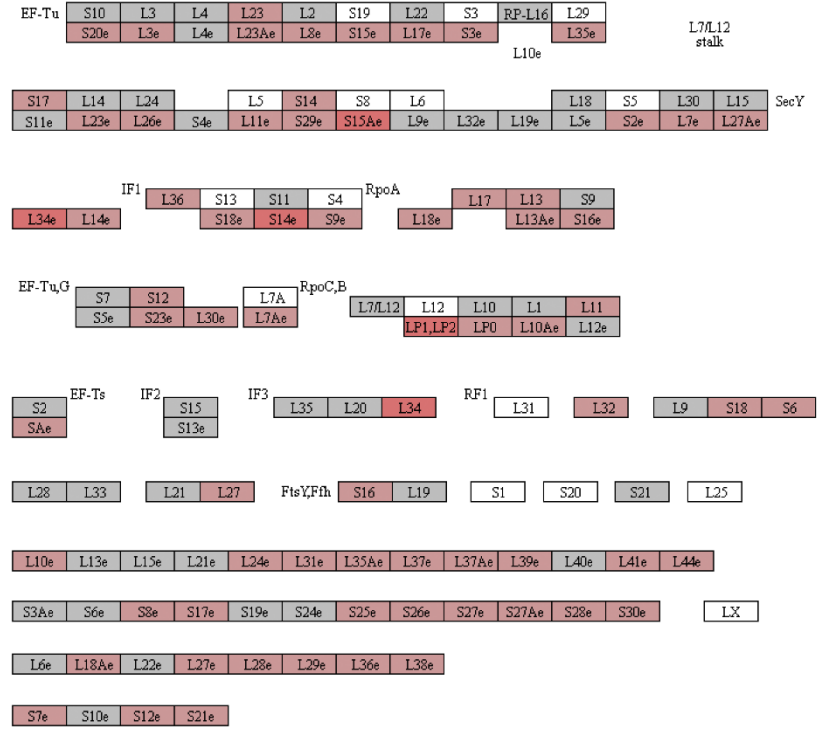
Small subunit (*Thermus aquaticus*)

Ribosomal RNAs

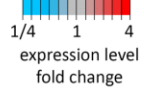
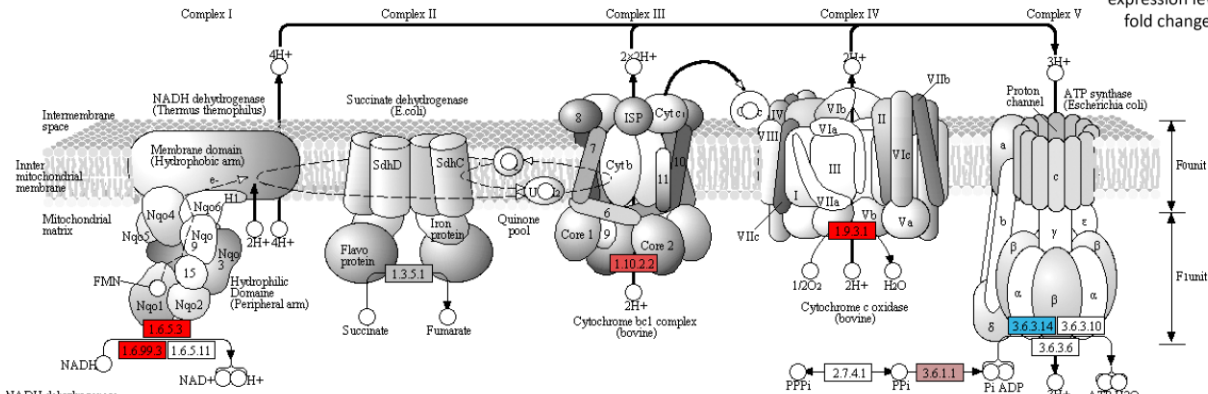
Bacteria / Archaea	23S	5S		16S
Eukaryotes	25S	5S	5.8S	18S



Ribosomal proteins



Oxidative phosphorylation



NADH dehydrogenase

E	ND1	ND2	ND3	ND4	ND4L	ND5	ND6										
E	Nduf1	Nduf2	Nduf3	Nduf4	Nduf5	Nduf6	Nduf7	Nduf8	Nduf9	Nduf10	Nduf11	Nduf12	Nduf13				
B/A	NuoA	NuoB	NuoC	NuoD	NuoE	NuoF	NuoG	NuoH	NuoI	NuoJ	NuoK	NuoL	NuoM	NuoN			
B/A	NdhC	NdhK	NdhJ	NdhH	NdhA	NdhI	NdhG	NdhE	NdhF	NdhD	NdhB	NdhL	NdhM	NdhN	HoxE	HoxF	HoxU
E	Ndufa1	Ndufa2	Ndufa3	Ndufa4	Ndufa5	Ndufa6	Ndufa7	Ndufa8	Ndufa9	Ndufa10	Ndufa11	Ndufa12	Ndufa13				
E	Ndub1	Ndub2	Ndub3	Ndub4	Ndub5	Ndub6	Ndub7	Ndub8	Ndub9	Ndub10	Ndub11	Ndub12	Ndub13				

Succinate dehydrogenase / Fumarate reductase

E	SDHC	SDHD	SDHA	SDHB				
B/A	SdhC	SdhD	SdhA	SdhB	FrdA	FrdB	FrdC	FrdD

Cytochrome c reductase

E/B/A	ISP	Cyt b	Cyt 1															
E	COX1	COX2	COX3	COX4	COX5A	COX5B	COX6A	COX6B	COX6C	COX7A	COX7B	COX7C	COX8	COX9	COX10	COX11	COX15	COX17

Cytochrome c oxidase, cbb3-type

B	I	II	IV	III
B/A	CytA	CytB		

Cytochrome bd complex

B/A	CydA	CydB
-----	------	------

F-type ATPase (Bacteria)

alpha	beta	gamma	delta	epsilon
a	b	c		

F-type ATPase (Eukaryotes)

alpha	beta	gamma	delta	epsilon	
OSCP	a	b	c	d	e
f	g	h/h	j	k	8

V/A-type ATPase (Bacteria, Archaea)

A	B	C	D	E	F	G/H
i	K					

V-type ATPase (Eukaryotes)

A	B	C	D	E	F	G	H
a	c	d	e	S1			

Additional file 1. Upregulated and downregulated pathways changing activity during aging of flies with overexpression of the *Gclc* gene and without overexpression based on KEGG data. This figure shows both genes with statistically significant differential expression ($p < 0.05$) and genes that only demonstrate up/down-regulation trends (statistically insignificant; almost all of them have low absolute LogFC values and are marked with light shades).