

SUPPLEMENTARY TABLES

Supplementary Table 1. Names and genotypes of the flies used in this study.

Name used	Genotype
<i>tim</i> > <i>Ldh</i>	<i>w;tim-GAL4/+;{UAS-ImpL3.ORF.3xHA.GW}</i>
<i>tim</i> > <i>w</i>	<i>w;tim-GAL4/+;+/+</i>
<i>tim^{ts}</i> > <i>Ldh</i>	<i>yw;tim-GAL4/+;tub-GAL80^{ts}/+{UAS-ImpL3.ORF.3xHA.GW}</i>
<i>tim^{ts}</i> > <i>w</i>	<i>yw;tim-GAL4/+;tub-GAL80^{ts}/+</i>
<i>elav^{ts}</i> > <i>Ldh</i>	<i>;elav-GAL4/+;tub-GAL80^{ts}/+{UAS-ImpL3.ORF.3xHA.GW}</i>
<i>elav^{ts}</i> > <i>w</i>	<i>;elav-GAL4/+;tub-GAL80^{ts}/+</i>
<i>repo^{ts}</i> > <i>Ldh</i>	<i>;tub-GAL80^{ts}/+;repo-GAL4/{UAS-ImpL3.ORF.3xHA.GW}</i>
<i>repo^{ts}</i> > <i>w</i>	<i>;tub-GAL80^{ts}/+;repo-GAL4/+</i>
<i>w</i> > <i>Ldh</i>	<i>w;;{UAS-ImpL3.ORF.3xHA.GW}</i>
<i>tim^{ts}</i> > <i>Ldh^{RNAi}</i>	<i>yw;tim-GAL4/+;tub-GAL80^{ts}/P{y+ v+ UAS-Ldh-RNAi}attP2/+</i>
<i>tim^{ts}</i> > <i>w</i>	<i>yw;tim-GAL4/+;tub-GAL80^{ts}/+</i>
<i>elav^{ts}</i> > <i>Ldh^{RNAi}</i>	<i>;elav-GAL4/+;tub-GAL80^{ts}/P{y+ v+ UAS-Ldh-RNAi}attP2</i>
<i>elav^{ts}</i> > <i>w</i>	<i>;elav-GAL4/+;tub-GAL80^{ts}/+</i>
<i>elav^{ts}</i> > <i>RNAi^{control}</i>	<i>;elav-GAL4/+;tub-GAL80^{ts}/P{y+CaryP}attP2</i>
<i>repo^{ts}</i> > <i>Ldh^{RNAi}</i>	<i>;tub-GAL80^{ts}/+;repo-GAL4/P{y+ v+ UAS-Ldh-RNAi}attP2</i>
<i>repo^{ts}</i> > <i>w</i>	<i>;tub-GAL80^{ts}/+;repo-GAL4/+</i>
<i>w</i> > <i>Ldh^{RNAi}</i>	<i>w;;P{y+ v+ UAS-Ldh-RNAi}attP2</i>

Supplementary Table 2. Longevity data of *Ldh* overexpressing flies and controls.

Temperature	Genotype	N	Lifespan (Days)		Gehan-Breslow-Wilcoxon p-value
			Median	Max	
18°C - 27°C	<i>tim^{ts}</i> > <i>Ldh</i>	104	49	63	-
	<i>tim^{ts}</i> > <i>w</i>	86	66.5	77	< 0.0001
	<i>elav^{ts}</i> > <i>Ldh</i>	99	63	85	-
	<i>elav^{ts}</i> > <i>w</i>	94	71	82	0.0129
	<i>repo^{ts}</i> > <i>Ldh</i>	99	63	82	-
	<i>repo^{ts}</i> > <i>w</i>	95	69	76	0.0124
	<i>w</i> > <i>Ldh</i>	102	79	90	< 0.0001*
18°C - 25°C	<i>tim^{ts}</i> > <i>Ldh</i>	96	67	79	-
	<i>tim^{ts}</i> > <i>w</i>	84	79	95	< 0.0001
	BR1 <i>elav^{ts}</i> > <i>Ldh</i>	97	79	107	-
	<i>elav^{ts}</i> > <i>w</i>	98	85.5	102	0.0022
	BR2 <i>elav^{ts}</i> > <i>Ldh</i>	180	74	102	-
	<i>elav^{ts}</i> > <i>w</i>	176	85	110	< 0.0001
	<i>repo^{ts}</i> > <i>Ldh</i>	99	79	97	-
	<i>repo^{ts}</i> > <i>w</i>	101	85	102	< 0.0001
	<i>w</i> > <i>Ldh</i>	97	94	107	< 0.0001*

*p-values of this control genotype are in comparison to all genotypes with overexpressed *Ldh*.

Supplementary Table 3. Longevity data of *Ldh^{RNAi}* expressing flies and controls.

Temperature	Genotype	N	Lifespan (Days)		Gehan-Breslow-Wilcoxon p-value
			Median	Max	
18°C - 27°C	<i>tim^{ts}>Ldh^{RNAi}</i>	81	77	90	-
	<i>tim^{ts}>w</i>	86	66.5	77	< 0.0001
	<i>elav^{ts}>Ldh^{RNAi}</i>	97	84	94	-
	<i>elav^{ts}>w</i>	94	71	82	< 0.0001
	<i>repo^{ts}>Ldh^{RNAi}</i>	93	76	84	-
	<i>repo^{ts}>w</i>	95	69	76	< 0.0001
	<i>w>Ldh^{RNAi}</i>	97	73	90	< 0.0001*
18°C - 25°C	<i>tim^{ts}>Ldh^{RNAi}</i>	97	88	106	-
	<i>tim^{ts}>w</i>	84	79	95	< 0.0001
	<i>elav^{ts}>Ldh^{RNAi}</i>	97	104	114	-
	<i>elav^{ts}>w</i>	98	85.5	102	< 0.0001
	<i>repo^{ts}>Ldh^{RNAi}</i>	104	87.5	106	-
	<i>repo^{ts}>w</i>	101	85	102	0.0287
	<i>w>Ldh^{RNAi}</i>	91	79	101	< 0.0001*
BR1	<i>elav^{ts}>Ldh^{RNAi}</i>	187	98	112	-
	<i>elav^{ts}>RNAi^{control}</i>	195	79	103	< 0.0001
BR2	<i>elav^{ts}>Ldh^{RNAi}</i>	98	91	117	-
	<i>elav^{ts}>RNAi^{control}</i>	124	78	114	< 0.0001

*p-values of this control genotype are in comparison to all genotypes expressing *Ldh^{RNAi}*.