

**File S1. Supplemental – Statistics**

Figure 2 – ALA marker imaging

For Fig. 2B, 2D, and 2F, Kruskal-Wallis one-way ANOVA (since data is normalized to WT, standard deviations differ significantly) followed by Dunn’s multiple comparisons.

For Fig. 2G and 2H, one-way ANOVA followed by Tukey’s multiple comparisons.

	<b>Strain Comparison</b>	<b>P value</b>
Fig. 2B	WT v. <i>vav-1</i>	****p< 0.0001
	<i>vav-1</i> v. <i>vav-1</i> ; <i>vav-1 rescue</i>	****p< 0.0001
Fig. 2D	WT v. <i>vav-1</i>	****p< 0.0001
	<i>vav-1</i> v. <i>vav-1</i> ; <i>vav-1 rescue</i>	****p< 0.0001
Fig. 2F	WT v. <i>vav-1</i>	*p<0.05
	WT v. <i>vav-1</i> ; <i>vav-1 rescue</i>	****p< 0.0001
Fig. 2G	<i>vav-1</i> v. <i>vav-1</i> ; <i>vav-1 rescue</i>	*p<0.05
Fig. 2H	WT v. <i>vav-1</i> ; <i>vav-1 rescue</i>	*p<0.05

Figure 3 – hs:LIN-3 Induced Quiescence

Fig. 3A, 3B, 3D, 3E One-way ANOVA with Tukey’s multiple comparison post-tests

	<b>Strain Comparison</b>	<b>P value</b>
Fig. 3A	WT v. hs:LIN-3	****p< 0.0001
	hs:LIN-3 v. hs:LIN-3; <i>vav-1</i>	****p< 0.0001
	hs:LIN-3; <i>vav-1</i> v. hs:LIN-3; <i>vav-1</i> ; <i>ALA neuron rescue</i>	****p< 0.0001
Fig. 3B	WT v. hs:LIN-3	****p< 0.0001
	hs:LIN-3 v. hs:LIN-3; <i>vav-1</i>	****p< 0.0001
	hs:LIN-3; <i>vav-1</i> v. hs:LIN-3; <i>vav-1</i> ; <i>ALA neuron rescue</i>	****p< 0.0001
Fig. 3D	WT v. hs:LIN-3	****p< 0.0001
	hs:LIN-3 v. hs:LIN-3; <i>vav-1</i>	****p< 0.0001
	hs:LIN-3; <i>vav-1</i> v. *hs:LIN-3; <i>vav-1</i> ; <i>vav-1 rescue</i>	****p< 0.0001
	*hs:LIN-3; <i>vav-1</i> ; <i>vav-1 rescue</i> v. hs:LIN-3; <i>vav-1</i> ; <i>GEF-dead vav-1 rescue</i>	****p< 0.0001
	*hs:LIN-3; <i>vav-1</i> ; <i>vav-1 rescue (minimal promoter)</i> v. hs:LIN-3; <i>vav-1</i> ; $\Delta$ SH3B <i>vav-1 rescue</i>	****p< 0.0001
Fig. 3E	WT v. hs:LIN-3	****p< 0.0001
	hs:LIN-3 v. hs:LIN-3; <i>vav-1</i>	****p< 0.0001
	hs:LIN-3; <i>vav-1</i> v. *hs:LIN-3; <i>vav-1</i> ; <i>vav-1 rescue</i>	****p< 0.0001

	*hs:LIN-3; <i>vav-1</i> ; <i>vav-1 rescue</i> v. hs:LIN-3; <i>vav-1</i> ; <i>GEF-dead vav-1 rescue</i>	****p< 0.0001
	*hs:LIN-3; <i>vav-1</i> ; <i>vav-1 rescue (minimal promoter)</i> v. hs:LIN-3; <i>vav-1</i> ; $\Delta$ SH3B <i>vav-1 rescue</i>	****p< 0.0001

Figure 4 – Lethargus Quiescence

Fig. 4D, 4E, 4F, and 4G, Kruskal-Wallis one-way ANOVA (since standard deviations of populations differ significantly) followed by Dunn’s multiple comparisons

	<b>Strain Comparison</b>	<b>P value</b>
Fig. 4D	WT v. <i>egl-30 (tg26)</i>	**p<0.01
	<i>vav-1</i> v. <i>egl-30 (tg26)</i>	**p<0.01
Fig. 4E	WT v. <i>egl-30 (tg26)</i>	****p<0.0001
	<i>vav-1</i> v. <i>egl-30 (tg26)</i>	****p<0.0001
Fig. 4F	WT v. <i>plc-3</i>	**p<0.01
	WT v. <i>vav-1</i> ; <i>rescue</i>	**p<0.01
Fig. 4G	WT v. <i>plc-3</i>	*p<0.05
	WT v. <i>vav-1</i> ; <i>rescue</i>	**p<0.01

Figure 5 – Heat Shock Recovery Quiescence

Fig. 5A and 5B, Two-way RM ANOVA, Tukey post-tests

	<b>Strain Comparison</b>	<b>Time Point (min)</b>	<b>p value</b>
Fig 5A	WT v. <i>vav-1</i>	20	* p<0.05
		30	** p<0.01
		40	* p<0.05
		50	* p<0.05
		60	* p<0.05
		100	* p<0.05
		150	** p<0.01
		180	** p<0.01
		240	* p<0.05
		300	* p<0.05
	WT v. <i>vav-1</i> ; <i>ALA rescue</i>	30	**p<0.01
		40	** p<0.01
		50	* p<0.05
	<i>vav-1</i> v. <i>vav-1</i> ; <i>ALA rescue</i>	100	* p<0.05
		240	* p<0.05

		300	** p<0.01
		360	* p<0.05
Fig 5B	WT v. <i>vav-1</i>	40	** p<0.01
		50	* p<0.05
		120	* p<0.05
		180	** p<0.01
		240	* p<0.05
	WT v. <i>vav-1</i> ; <i>GEF-dead rescue</i>	30	* p<0.05
		40	** p<0.01
		50	** p<0.01
		120	* p<0.05
		300	* p<0.05
	WT v. <i>vav-1</i> ; <i>vav-1 rescue</i>	10	**p<0.01
		30	** p<0.01
		40	*** p<0.001
		50	* p<0.05
	<i>vav-1</i> v. <i>vav-1</i> ; <i>vav-1 rescue</i>	10	*** p<0.001
		120	* p<0.05
		180	** p<0.01
	<i>vav-1</i> ; <i>GEF-dead rescue</i> v. <i>vav-1</i> ; <i>vav-1 rescue</i>	10	* p<0.05
		120	* p<0.05
		180	* p<0.05
		300	* p<0.05

Figure 6 - Stress Survival

Fig. 6A, 6B, 6C, Two-way RM ANOVA, Tukey post-tests

	Strain Comparison	Time Point (hours)	p value
Fig. 6A	WT v. <i>vav-1</i>	48	****p< 0.0001
		72	****p< 0.0001
		96	****p< 0.0001
	WT v. <i>plc-3</i>	72	****p< 0.0001
		96	****p< 0.0001
	<i>vav-1</i> v. <i>vav-1</i> ; <i>vav-1 rescue</i>	48	***p<0.001
		72	****p<0.0001
		96	****p<0.0001
	<i>vav-1</i> v. <i>plc-3</i>	48	**p<0.01
		72	****p<0.0001
		96	**p<0.01

Fig. 6C	WT v. <i>vav-1</i>	72	****p<0.0001
		96	****p<0.0001
	<i>vav-1</i> v. <i>egl-4; vav-1</i>	72	**p<0.01
		96	**p<0.01

Figure 7 – Heat shock-induced VAV-1

One-way ANOVA with Tukey's multiple comparison post-tests

Strain Comparison	P value
WT v. <i>hs::vav-1</i>	**p<0.01
<i>hs::GFP</i> v. <i>hs::vav-1</i>	**p<0.01
<i>hs::vav-1</i> v. <i>hs::vav-1</i> no heat	***p<0.001
<i>hs::vav-1</i> v. <i>hs::vav-1</i> (10 hrs)	**p<0.01

#### Supplemental Figures

Fig. S1 and S2, one-way ANOVA with Tukey's multiple comparison post-tests

Fig. S3 Unpaired two-tailed T Tests

	Strain Comparison	P value
Fig. S1	<i>hs::LIN-3</i> v. <i>hs::LIN-3; vav-1</i>	***p<0.001
	<i>hs::LIN-3</i> v. <i>hs::LIN-3; vav-1; ida-1 (oe)</i>	***p<0.001
Fig. S2A	<i>hs::LIN-3</i> v. <i>hs::LIN-3; vav-1</i>	***p<0.001
Fig. S2B	<i>hs::LIN-3</i> v. <i>hs::LIN-3; vav-1</i>	***p<0.001
Fig. S3	WT v. WT 37°C	**p<0.003
	<i>vav-1</i> v. <i>vav-1</i> 37°C	*p<0.02