

Table S1. List of proteins identified after Yeast-Two Hybrid screen

| S. NO. | Identified potential prey interactors | NCBI Accession |
|--------|---|----------------|
| 1. | PREDICTED: Aedes aegypti 60S acidic ribosomal protein P1 (LOC5565839), mRNA | XM_001650143.2 |
| 2. | PREDICTED: Aedes aegypti 60S acidic ribosomal protein P1-like (LOC110678133) | XM_021850740.1 |
| 3. | PREDICTED: Aedes aegypti 60S acidic ribosomal protein P1 (LOC5578368), mRNA | XM_001656889.2 |
| 4. | Aedes aegypti clone AE-294 60S acidic ribosomal protein P1 mRNA, complete cds | DQ440047.1 |
| 5. | PREDICTED: Aedes aegypti 60S acidic ribosomal protein P1 (LOC5577349), mRNA | XM_001656376.2 |
| 6. | PREDICTED: Aedes aegypti 60S acidic ribosomal protein P1 (LOC5578249), partial mRNA | XM_001663729.2 |

Figures S1- S3. The following page contains Western blot images used in main figures without cropping, color removal, and brightness/ contrast correction. The label above each image contains a reference to the main text figure where the image is included.

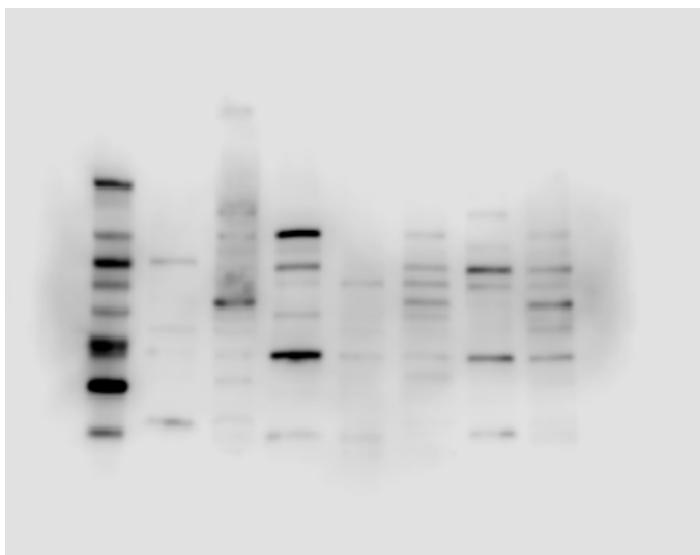
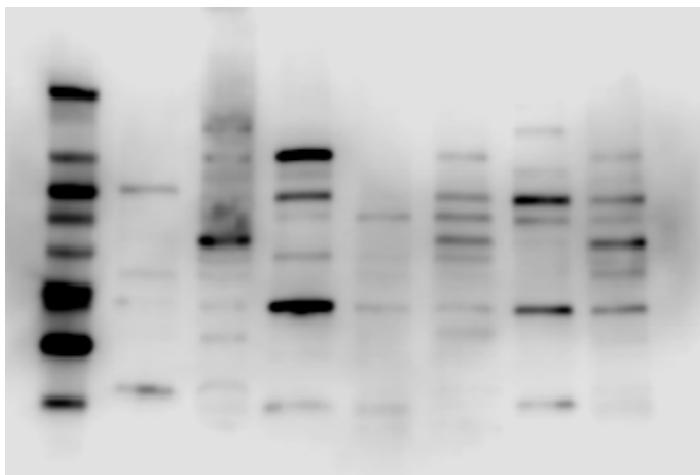


Figure S1. P1 expression in different mosquito organs and tissues tested (Fig. 3 b).

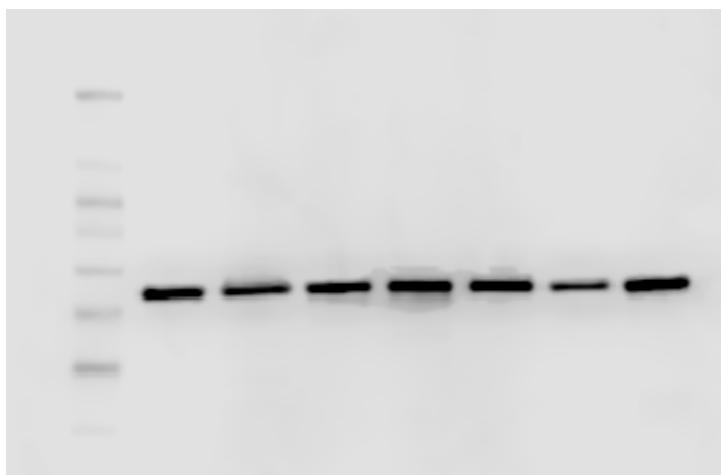


Figure S2. Image for Actin control (Fig. 3 b)

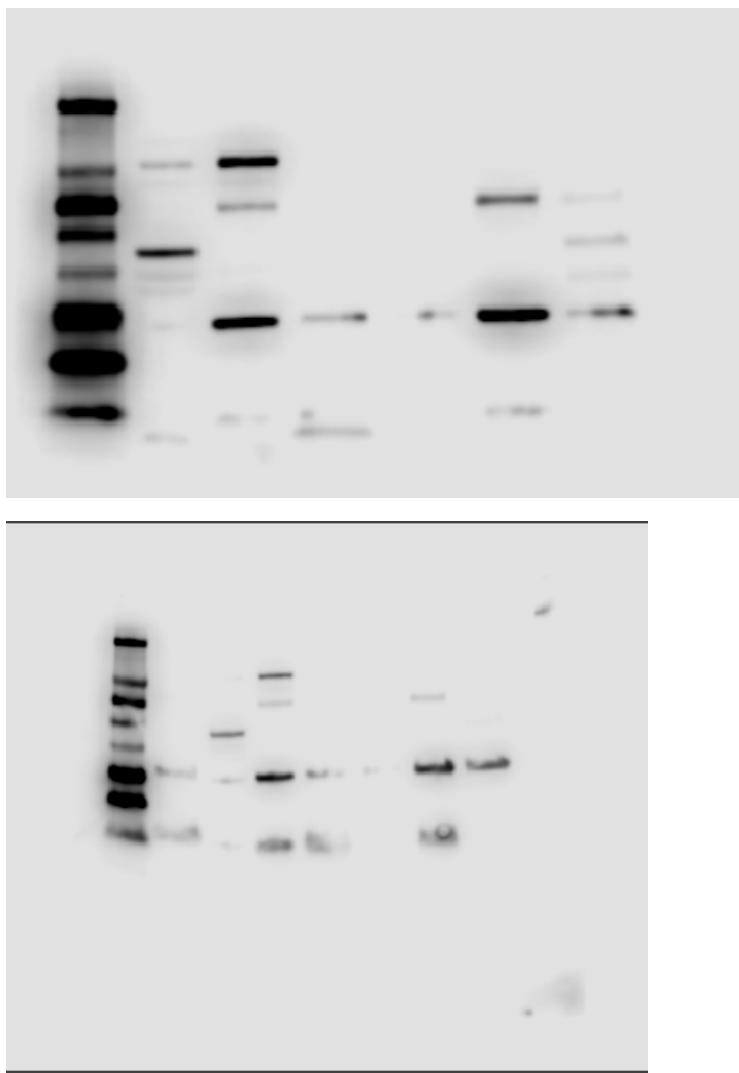


Figure S3. P1 expression western blot for different mosquito organs tested (Thorax, Fat Body, Mid Gut, Malpighian Tubules, Ovary, Head)

Table S2. Mosquito survival data

| # mosquitoes dead (not cumulative) | | | | | | | | |
|------------------------------------|------------------------|---------------|---------------|-------------------------|---------------|---------------|----------------------------|-----------------------------|
| Time after dsRNA injection (hours) | GFP injected (control) | | | P1 injected (treatment) | | | AVG GFP injected (control) | AVG P1 injected (treatment) |
| | R1 (66 total) | R2 (68 total) | R3 (58 total) | R1 (66 total) | R2 (70 total) | R3 (60 total) | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | 2 | 7 | 1 | 5 | 19 | 4 | 3.33 | 9.33 |
| 48 | 1 | 4 | 2 | 2 | 10 | 5 | 2.33 | 5.66 |
| 72 | 7 | 3 | 2 | 16 | 8 | 7 | 4 | 10.33 |
| 96 | 1 | 2 | 0 | 3 | 5 | 3 | 1 | 3.66 |
| # mosquitoes dead (cumulative) | | | | | | | | |
| Time after dsRNA injection (hours) | GFP injected (control) | | | P1 injected (treatment) | | | AVG GFP injected (control) | AVG P1 injected (treatment) |
| | R1 (66 total) | R2 (68 total) | R3 (58 total) | R1 (66 total) | R2 (70 total) | R3 (60 total) | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | 2 | 7 | 1 | 5 | 19 | 4 | 3.33 | 9.33 |
| 48 | 3 | 11 | 3 | 7 | 29 | 9 | 5.66 | 15 |
| 72 | 10 | 14 | 5 | 23 | 37 | 16 | 9.66 | 25.33 |
| 96 | 11 | 16 | 5 | 26 | 42 | 19 | 10.66 | 29 |
| # mosquitoes alive | | | | | | | | |
| Time after dsRNA injection (hours) | GFP injected (control) | | | P1 injected (treatment) | | | AVG GFP injected (control) | AVG P1 injected (treatment) |
| | R1 (66 total) | R2 (68 total) | R3 (58 total) | R1 (66 total) | R2 (70 total) | R3 (60 total) | | |
| 0 | 66 | 68 | 58 | 66 | 70 | 60 | 64 | 65.33 |
| 24 | 64 | 61 | 57 | 61 | 51 | 56 | 60.66 | 56 |
| 48 | 63 | 57 | 55 | 59 | 41 | 51 | 58.33 | 50.33 |
| 72 | 56 | 54 | 53 | 43 | 33 | 44 | 54.33 | 40 |
| 96 | 55 | 52 | 53 | 40 | 28 | 41 | 53.33 | 36.33 |

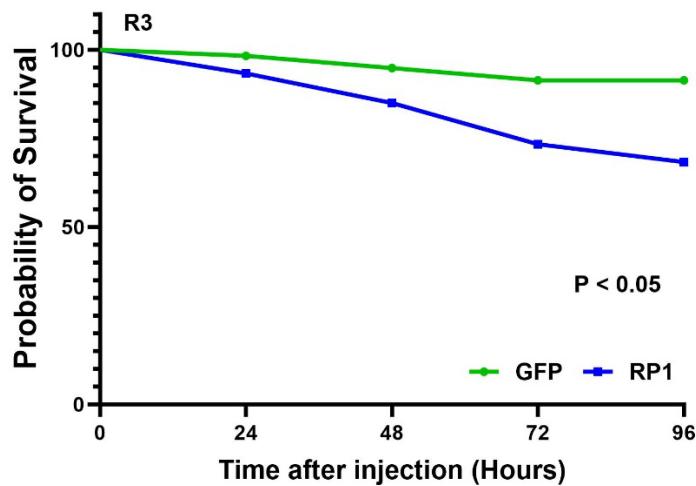
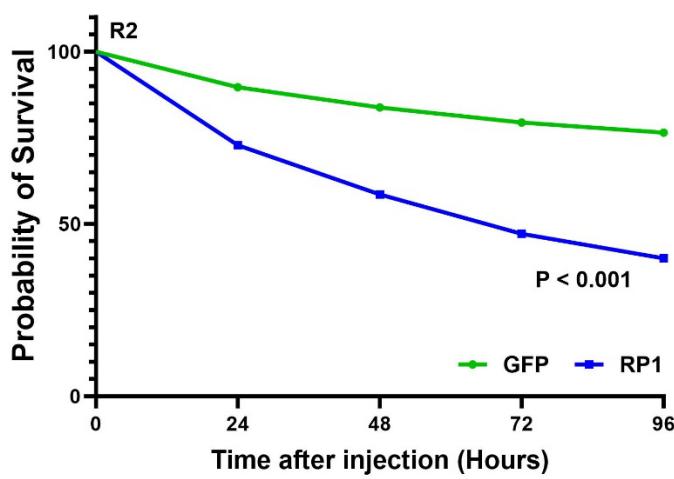
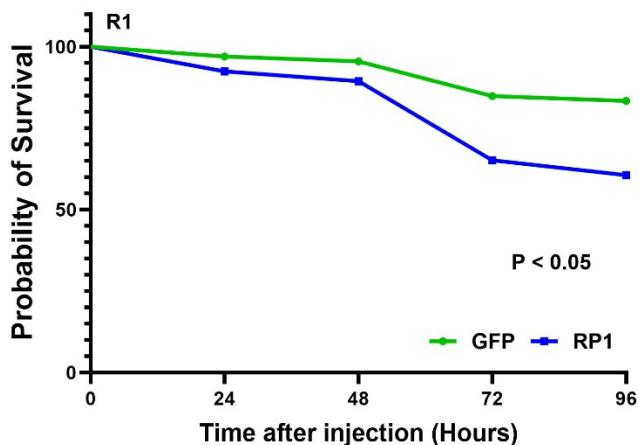


Figure S4. Survival Curve Replicates (R1-R3), (Supplemental figure for Figure 3.)

Table S3. Measurements from mosquito ovaries post-injection and PBM

| Ovary length(mm) | | | | | | | | | |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| | GFP | P1 | GFP | P1 | GFP | P1 | GFP | P1 | |
| | 0 Hr | 0 Hr | 24 Hr | 24 Hr | 48 Hr | 48 Hr | 72 Hr | 72 Hr | |
| | 0.9 | 0.7 | 2 | 1.3 | 2.8 | 1.4 | 3.1 | 1.6 | |
| | 1 | 0.8 | 2.1 | 1.4 | 2.7 | 1.5 | 2.8 | 1.7 | |
| | 0.7 | 0.7 | 1.9 | 1.3 | 2.8 | 1.4 | 3 | 1.4 | |
| | 0.8 | 0.8 | 2.1 | 1.2 | 2.9 | 1.3 | 2.9 | 1.5 | |
| | 0.9 | 0.8 | 2.1 | 1.3 | 3.1 | 1.7 | 2.8 | 1.3 | |
| | 1 | 0.9 | 2 | 1.4 | 2.9 | 1.6 | 2.7 | 1.6 | |
| | 0.8 | 0.8 | 2.1 | 1.5 | 2.8 | 1.4 | 2.8 | 1.4 | |
| | 0.7 | 0.7 | 1.9 | 1.3 | 2.9 | 1.5 | 3 | 1.5 | |
| | 0.8 | 0.8 | 2 | 1.3 | 2.7 | 1.3 | 2.6 | 1.3 | |
| | 0.9 | 0.8 | 2.1 | 1.2 | 2.8 | 1.4 | 2.9 | 1.4 | |
| Average | 0.85 | 0.78 | 2.03 | 1.32 | 2.84 | 1.45 | 2.86 | 1.47 | |

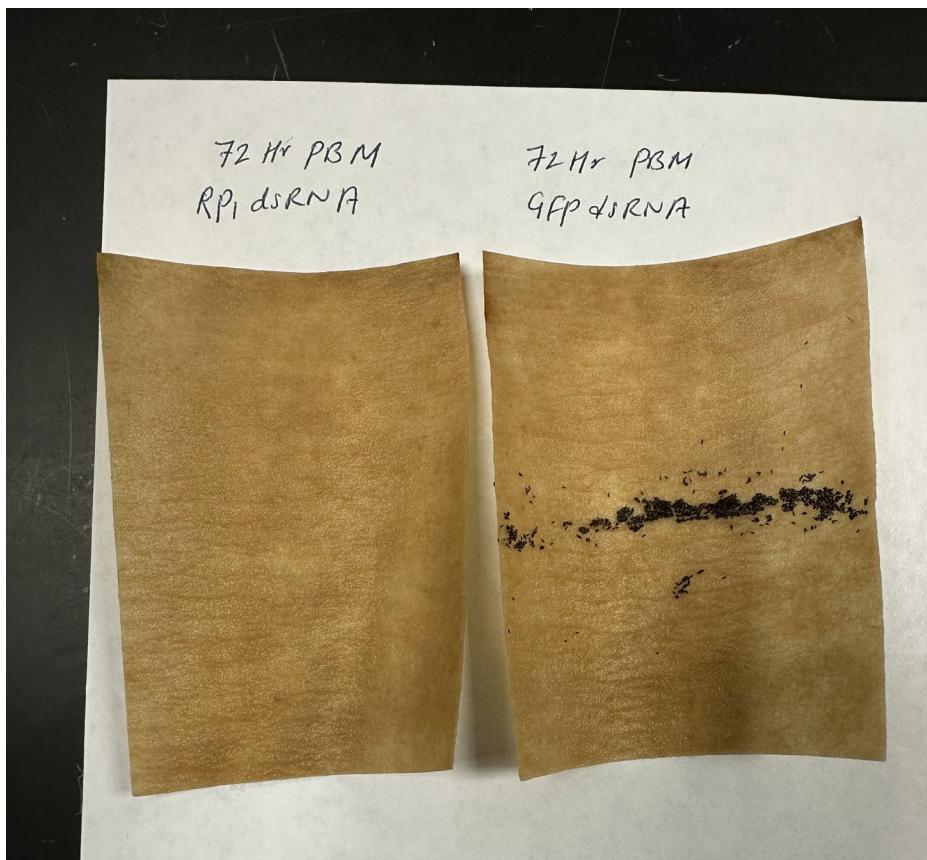


Figure S5. Egg-laying paper with eggs and without eggs