**Figure 7- source data 1A.** Lifespan analysis of *FBGS> UAS fasn1RNAi*.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Lifespan (Days)** | | **p value** | **2** |
| Experiment 1 | Maximum (Number of flies) | Median |  |  |
| *FBGS/+; UAS FASN1RNAi/+ AL -RU* | 54(188) | 32 | 0.00E+00 | 69.60 |
| *FBGS/+; UAS FASN1RNAi/+ DR -RU* | 98(136) | 42 |
| *FBGS/+; UAS FASN1RNAi/+ AL +RU* | 44(123) | 30 | 0.00E+00 | 65.62 |
| *FBGS/+; UAS FASN1RNAi/+ DR +RU* | 86(127) | 40 |
| *FBGS/+; UAS FASN1RNAi/+ AL -RU* | 54(188) | 32 | 8.30E-06 | 19.86 |
| *FBGS/+; UAS FASN1RNAi/+ AL +RU* | 44(123) | 30 |
| *FBGS/+; UAS FASN1RNAi/+ DR -RU* | 98(136) | 42 | 0.0334 | 4.525 |
| *FBGS/+; UAS FASN1RNAi/+ DR +RU* | 86(127) | 30 |
| #Experiment 2 |  |  |  |  |
| *FBGS/+; UAS FASN1RNAi/+ AL -RU* | 62(124) | 32 | 0.00E+00 | 115.2 |
| *FBGS/+; UAS FASN1RNAi/+ DR -RU* | 104(100) | 62 |
| *FBGS/+; UAS FASN1RNAi/+ AL +RU* | 44(106) | 26 | 0.00E+00 | 167.5 |
| *FBGS/+; UAS FASN1RNAi/+ DR +RU* | 86(110) | 60 |
| *FBGS/+; UAS FASN1RNAi/+ AL -RU* | 62(124) | 32 | 6.70E-06 | 20.26 |
| *FBGS/+; UAS FASN1RNAi/+ AL +RU* | 44(106) | 26 |
| *FBGS/+; UAS FASN1RNAi/+ DR -RU* | 104(100) | 62 | 0.0156 | 5.850 |
| *FBGS/+; UAS FASN1RNAi/+ DR +RU* | 86(110) | 60 |

#Experiment 2 is represented in Figure 7I; p value calculated by log rank test; 2, Chi2 calculated by Log rank test.

**Figure 7- source data 1B.** Cox regression analysis of *FBGS> UAS fasn1RNAi*.

|  |  |  |
| --- | --- | --- |
|  | **Risk factor** | **p value** |
| Experiment 1 | Diet | 0 |
| Ligand | 0.03420 |
| Experiment 2# | Diet | 0 |
| Ligand | 0.0023 |

**Figure 7- source data 1C.** Lifespan analysis of *+/+; UAS fasn1RNAi/+* genotype.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Lifespan (Days)** | | **p value** | **2** |
| Experiment | Maximum (Number of flies) | Median |  |  |
| *+/+; UAS FASN1RNAi/+ AL -RU* | 38(108) | 28 | 0.00E+00 | 137.3 |
| *+/+; UAS FASN1RNAi/+ DR -RU* | 72(110) | 50 |
| *+/+; UAS FASN1RNAi/+ AL +RU* | 36(106) | 26 | 0.00E+00 | 151.58 |
| *+/+; UAS FASN1RNAi/+ DR +RU* | 76(90) | 46 |
| *+/+; UAS FASN1RNAi/+ AL -RU* | 38(108) | 28 | 0.8532 | 0.03 |
| *+/+; UAS FASN1RNAi/+ AL +RU* | 36(106) | 26 |
| *+/+; UAS FASN1RNAi/+ DR -RU* | 72(110) | 50 | 0.2536 | 1.3 |
| *+/+; UAS FASN1RNAi/+ DR +RU* | 76(90) | 46 |

#Experiment is represented in Figure 7-figure supplement 3A.

**Figure 7- source data 1D.** Cox regression analysis of *+/+; UAS fasn1RNAi/+* genotype.

|  |  |  |
| --- | --- | --- |
|  | **Risk factor** | **p value** |
| Experiment 1 | Diet | 0 |
| Ligand | 0.6213 |