**Figure 7-source data 2A.** Lifespan analysis of *FBGS> UAS fatpRNAi*.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Lifespan (Days)** | | **p value** | **2** |
| Experiment 1 | Maximum (Number of flies) | Median |  |  |
| *FBGS/+; UAS fatpRNAi/+ AL -RU* | 62(123) | 34 | 0.00E+00 | 40.74 |
| *FBGS/+; UAS fatpRNAi/+ DR -RU* | 94(97) | 46 |
| *FBGS/+; UAS fatpRNAi/+ AL +RU* | 58(113) | 36 | 2.10E-05 | 18.11 |
| *FBGS/+; UAS fatpRNAi/+ DR +RU* | 74(124) | 40 |
| *FBGS/+; UAS fatpRNAi/+ AL -RU* | 62(123) | 34 | 0.9425 | 0.01 |
| *FBGS/+; UAS fatpRNAi/+ AL +RU* | 58(113) | 36 |
| *FBGS/+; UAS fatpRNAi/+ DR -RU* | 94(97) | 46 | 3.00E-05 | 17.41 |
| *FBGS/+; UAS fatpRNAi/+ DR +RU* | 74(124) | 40 |
| #Experiment 2 |  |  |  |  |
| *FBGS/+; UAS fatpRNAi/+ AL -RU* | 58(85) | 36 | 0.00E+00 | 70.01 |
| *FBGS/+; UAS fatpRNAi/+ DR -RU* | 96(79) | 54 |
| *FBGS/+; UAS fatpRNAi/+ AL +RU* | 58(132) | 36 | 0.00E+00 | 57.62 |
| *FBGS/+; UAS fatpRNAi/+ DR +RU* | 86(100) | 46 |
| *FBGS/+; UAS fatpRNAi/+ AL -RU* | 58(85) | 36 | 0.0746 | 3.18 |
| *FBGS/+; UAS fatpRNAi/+ AL +RU* | 58(132) | 36 |
| *FBGS/+; UAS fatpRNAi/+ DR -RU* | 96(79) | 54 | 0.0002 | 13.49 |
| *FBGS/+; UAS fatpRNAi/+ DR +RU* | 86(100) | 46 |

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

**Figure 7-source data 2B.** Cox regression analysis of *FBGS> UAS fatp1RNAi*.

|  |  |  |
| --- | --- | --- |
|  | **Risk factor** | **p value** |
| Experiment 1 | Diet | 0.000058 |
| Ligand | 0.021334 |
| Experiment 2# | Diet | 0.000001 |
| Ligand | 0.224125 |

**Figure 7-source data 2C.** Lifespan analysis of *+/+; UAS fatpRNAi/+* genotype.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Lifespan (Days)** | | **p value** | **2** |
| #Experiment | Maximum (Number of flies) | Median |  |  |
| *+/+; UAS fatpRNAi/+ AL -RU* | 48(83) | 36 | 0.0001 | 16.35 |
| *+/+; UAS fatpRNAi/+ DR -RU* | 64(93) | 38 |
| *+/+; UAS fatpRNAi/+ AL +RU* | 44(86) | 32 | 0.00E+00 | 71.68 |
| *+/+; UAS fatpRNAi/+ DR +RU* | 62(94) | 42 |
| *+/+; UAS fatpRNAi/+ AL -RU* | 48(83) | 36 | 0.0001 | 14.5 |
| *+/+; UAS fatpRNAi/+ AL +RU* | 44(86) | 32 |
| *+/+; UAS fatpRNAi/+ DR -RU* | 64(93) | 38 | 0.927 | 0.01 |
| *+/+; UAS fatpRNAi/+ DR +RU* | 62(94) | 42 |

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

**Figure 7-source data 2D.** Cox regression analysis of *+/+; UAS fatpRNAi/+*

|  |  |  |
| --- | --- | --- |
|  | **Risk factor** | **p value** |
| Experiment 1 | Diet | 0.00058 |
| Ligand | 0.4602 |