**Supplementary File 1.** **Candidate Screen of autophagy-related genes.**

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| **Drosophila stock** | **Effect on gene** | **Eye Score** |
| *UAS-Atg6RNAi* | RNAi line | -3.5 |
| *UAS-Atg18aRNAi* | RNAi line | -3 |
| *UAS-Atg1* | cDNA overexpression | -3 |
| *UAS-Atg7* | cDNA overexpression | -2.5 |
| *UAS-Atg101RNAi* | RNAi line | -2 |
| *UAS-Atg8aRNAi* | RNAi line | -2 |
| *UAS-Atg5RNAi* | RNAi line | -2 |
| *UAS-Atg6RNAi* | RNAi line | -2 |
| *UAS-Atg8aRNAi* | RNAi line | -2 |
| *UAS-Ref(2)PRNAi* | RNAi line | -2 |
| *UAS-Atg14RNAi* | RNAi line | -2 |
| *UAS-Atg16RNAi* | RNAi line | -1.5 |
| *UAS-Atg16RNAi* | RNAi line | -1.5 |
| *UAS-Atg17RNAi* | RNAi line | -1.5 |
| *UAS-Atg6RNAi* | RNAi line | -1 |
| *UAS-Atg8bRNAi* | RNAi line | -1 |
| *UAS-bchsRNAi* | RNAi line | -1 |
| *UAS-Atg8bRNAi* | RNAi line | -1 |
| *UAS-Atg9RNAi* | RNAi line | -0.5 |
| *UAS-Atg18aRNAi* | RNAi line | -0.5 |
| *UAS-GyfRNAi* | RNAi line | -0.5 |
| *Atg600096* | P-element insertion | 0 |
| *UAS-Atg4bRNAi* | RNAi line | 0 |
| *UAS-Atg17EP* | EP overexpression | 0 |
| *bchs58* | EMS mutagenesis | 0 |
| *UAS-Atg4aRNAi* | RNAi line | 0 |
| *UAS-Atg4aRNAi* | RNAi line | 0 |
| *UAS-Atg10RNAi* | RNAi line | 0 |
| *UAS-Atg16RNAi* | RNAi line | 0 |
| *UAS-Atg9RNAi* | RNAi line | 0 |
| *UAS-ltRNAi* | RNAi line | 0 |
| *UAS-Atg7RNAi* | RNAi line | 0 |
| *Atg7d06996* | P-element insertion | 0 |
| *UAS-Atg4aRNAi* | RNAi line | 1 |
| *UAS-Atg8aRNAi* | RNAi line | 1 |
| *Bchs17* | EMS mutagenesis | 1 |
| *UAS-Atg8aEP* | EP overexpression | 1 |
| *UAS-Atg2EP* | EP overexpression | 1 |
| *UAS-Atg7RNAi* | RNAi line | 1 |
| *UAS-Atg13RNAi* | RNAi line | 1.5 |
| *UAS-Atg14RNAi* | RNAi line | 1.5 |
| *UAS-Atg3EP* | EP overexpression | 2 |
| *UAS-Atg18bRNAi* | RNAi line | 2 |
| *UAS-Atg2RNAi* | RNAi line | 2 |
| *Snap29B6-21* | EMS | 2 |
| *UAS-Atg3RNAi* | RNAi line | 3 |
| *UAS-Atg2RNAi* | RNAi line | 3 |
| *UAS-Atg18bRNAi* | RNAi line | 3 |
| *Atg4bP0997* | P-element insertion | 4 |
| *UAS-bchs-HA* | cDNA overexpression | 4 |