

<i>D. melanogaster</i>	<i>C. elegans</i>
<b>Gene / CG</b>	<b>CGC / GeneSeq</b>
<b>Up-regulated by MnSOD: Same chronological age</b>	<b>Up-regulated in <i>daf-2</i> mutants</b>
<b>Synaptobrevin</b> <i>n-syb</i> / CG17248	<b>Synaptobrevin</b> ** <i>snb-1</i> / T10H9.4
<b>Jun-related antigen</b> <i>Jra</i> / CG2275	<b>Transcriptional activator of the JUN family</b> *T24H10.2
<b>Glutathione peroxidase</b> <i>PHGPx</i> / CG12013	<b>Glutathione peroxidase</b> **T09A12.2
<b>Heterogeneous nuclear ribonucleoprotein</b> <i>Hrb98DE</i> / CG9983	<b>Heterogeneous nuclear ribonucleoprotein</b> ** <i>msi-1</i> / R10E9.1
<b>Uncharacterized</b> CG15099	<b>Predicted leucine zipper transcription factors</b> ** <i>pad-1</i> / Y18D10A.13
<b>Catalase activity</b> <i>kitty (kit)</i> / CG9314	<b>Catalase (peroxisomal, cytosolic)</b> *** <i>ctl-2</i> / Y54G11A.5b, *** <i>ctl-1</i> / Y54G11A.6
<b>Up-regulated by MnSOD: Same physiological age</b>	<b>Up-regulated in <i>daf-2</i> mutants</b>
<b>Ortholog of the serine/threonine kinase Akt/PKB</b> <i>Akt1</i> / CG4006	<b>Ortholog of the serine/threonine kinase Akt/PKB</b> *** <i>akt-1</i> / C12D8.10B
<b>Ankryin</b> <i>Ank</i> / CG1651	<b>Ankyrin-like protein</b> *** <i>unc-44</i> / B0350.2A
<b>Oxysterol binding</b> CG3860	<b>Oxysterol-binding protein</b> *** <i>obr-2</i> / F14H8.1
<b>Uncharacterized</b> CG7337	<b>Similar to mouse MAPK binding protein</b> **H24G06.1
<b>Sterol O-acyltransferase activity</b> CG8112	<b>Acyl-CoA:diacylglycerol o-acyltransferase activity</b> **H19N07.4
<b>Actin monomer binding</b> <i>cib</i> / CG4944	<b>Thymosin beta ortholog; actin polymerization</b> *** <i>tth-1</i> / F08F1.8
<b>Cytochrome P450 monooxygenase</b> <i>Cyp6a13</i> / CG2397	<b>Cytochrome P450 CYP4/CYP19/CYP26 subfamilies</b> <i>cyp-29A2</i> / T19B10.1
<b>Beta-carotene 15,15'-monooxygenase activity</b> <i>ninaB</i> / CG9347	<b>Beta, beta-carotene 15,15'-dioxygenase</b> **F53C3.12
<b>Ras GTPase</b> <i>Ras64B</i>	<b>Ras GTPase</b> ** <i>ras-1</i> / C44C11.1
<b>Synaptotagmin</b> <i>syt</i>	<b>Synaptotagmin</b> *** <i>snt-1</i> / F31E8.2

**Additional data file 7:** Additional longevity promoting genes conserved between *C. elegans daf-2* mutants and MnSOD over-expressing *Drosophila*. *Drosophila* and *C. elegans* ortholog matches that are differentially expressed in response to MnSOD over-expression (at only one time point) and in *daf-2* mutants in a *daf-16* dependent manner. Expected values from BLASTP are indicated as follows: \*  $5 \times 10^{-10} < p \leq 5 \times 10^{-02}$ , \*\*  $5 \times 10^{-70} < p \leq 5 \times 10^{-10}$ , \*\*\*  $p \leq 5 \times 10^{-70}$ . Beige shading indicates genes that are not reciprocal best BLAST hits, but are members of the corresponding gene family.