Anti-Aging

**OCR Number:** OCR 5132

**Description:**

A new method to increase longevity or treating cellular stress

- Over-expressing either pch-2 or bmk-1 in *C. elegans* by microinjection extends worm lifespan by ~25% and enhances worm survival in response to various stressors including oxidation, apoptosis and DNA damage.

- Inhibition of either gene by RNAi results in shortened lifespan. Moreover, the over-expression of the human equivalents of these two genes in cultured fibroblasts confers resistance to environmental stressors, and promotes cell survival after exposure to radiation or oxidative stress.

**Patent:** US Patent Application Pending


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**Over-expression of the genes extends lifespan and stress-resistance in C. elegans.** Gene expression level of (a) pch-2 and (c) bmk-1 and lifespan measurement of (b) pch-2 and (d) bmk-1.