

## Gene is found affecting the aging process

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Researchers report the loss of a gene called p63 accelerates aging in mice, with similar genes present in many organisms, including humans.

The scientists say mice born without the p63 gene do not survive. In previous studies, Alea Mills of Cold Spring Harbor Laboratory, found mice born with only one copy of the gene die at a young age.

To study p63 function in adult mice, Mills and colleagues devised a sophisticated molecular genetic technique enabling them to eliminate both copies of the gene from particular tissues after the animals reached maturity.

The effects of premature aging observed in the p63 deficient mice included hair loss, reduced fitness and shortened lifespan.

"Aging and cancer are two sides of the same coin," said Mills. "In one case, cells stop dividing and in the other, they can't stop dividing. We suspect having the right amount of the p63 protein in the right cells at the right time creates a balance that enables organisms to live relatively cancer-free for a reasonably long time."

The study appears in the journal Genes & Development.

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