

Production of anti-aging and long-life mice –Application for anti-aging therapies–

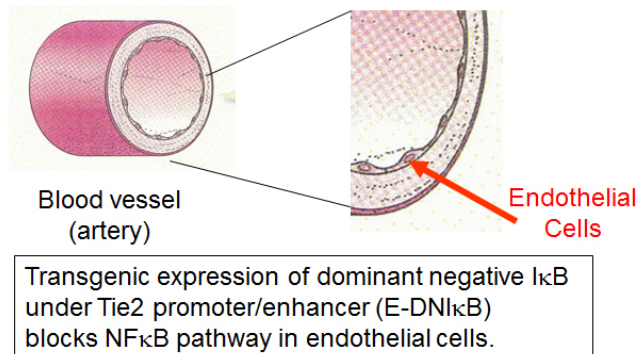
Professor Hideki Katagiri

A research group led by Professor Hideki Katagiri and Assistant Professor Yutaka Hasegawa at Tohoku University Graduate School of Medicine, has successfully slowed aging of mice and prolonged their life-spans, by suppressing inflammatory responses in vascular endothelial cells.

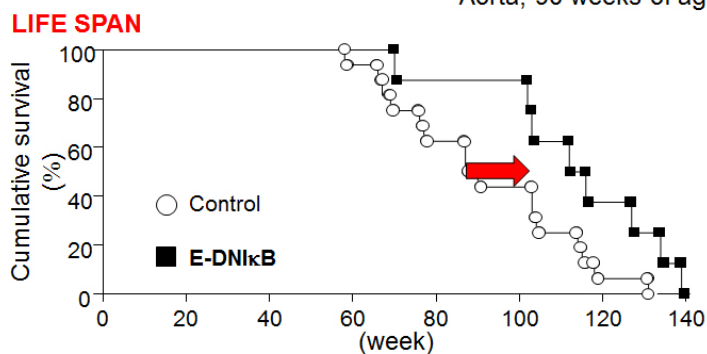
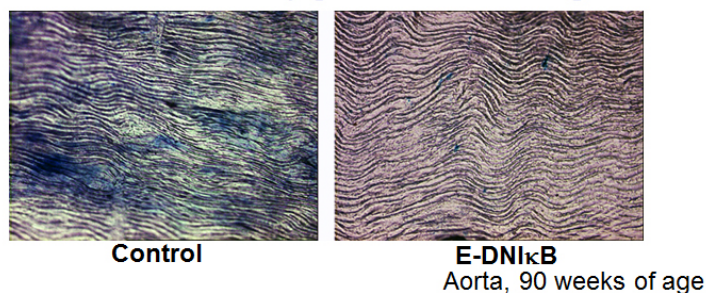
The research result has been published in *Circulation* on March 6, 2012.



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Senescence-associated β -galactosidase staining



Blockade of NF- κB pathway in vascular endothelial cells prevented vascular senescence and prolonged lifespan of the whole body. The endothelium plays important roles in aging through intracellular NF- κB signaling, thereby ultimately affecting life span. Endothelial NF- κB signaling is a potential target for treating the metabolic syndrome and for antiaging strategies.

"Blockade of the nuclear factor- κB pathway in the endothelium prevents insulin resistance and prolongs life spans."

Hasegawa Y, Saito T, Ogihara T, Ishigaki Y, Yamada T, Imai J, Uno K, Gao J, Kaneko K, Shimosawa T, Asano T, Fujita T, Oka Y, Katagiri H.

Circulation. 2012 Mar 6;125(9):1122-33. doi: 10.1161/CIRCULATIONAHA.111.054346. Epub 2012 Feb 1.

PMID: 22302838 [PubMed - indexed for MEDLINE]