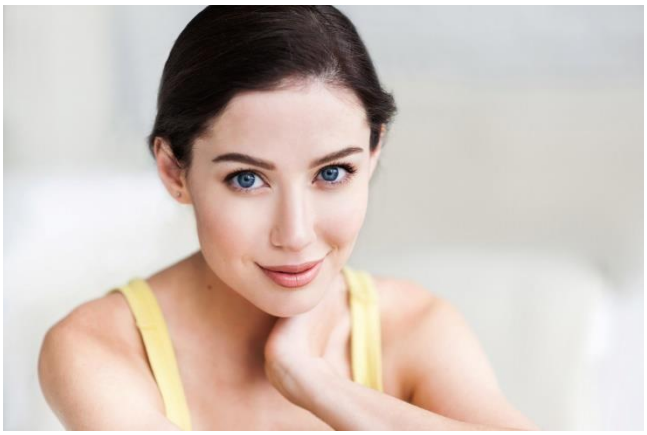
Genetic Science Spotlight

Dartmouth Medical School: An SNP that Leads to Accelerated Skin Aging



In aged skin, it has been shown that the Matrix Metalloproteinases-1 (MMP-1) level is significantly elevated ($p<0.02$). Level of MMP-1 is largely controlled by transcriptional regulation. A single nucleotide polymorphism (SNP) at -1607bp in the MMP-1 promoter, where an additional guanine (G), 5'-GGA-3', was shown to display significantly higher transcription in normal fibroblasts than the wildtype 5'-GA-3' ($p<0.05$), by creating a binding site for ETS-1 transcription factor. The GG (2G) allele was also found to be present in approximately 30% of the population but not a mutation ($p>0.001$).

Rutter JL, M. T., *et al*. 1998. A single nucleotide polymorphism in the matrix metalloproteinase-1 promoter creates an Ets binding site and augments transcription. Cancer Res, vol. 58, no. 23, pp. 5321-5325.

https://www.ncbi.nlm.nih.gov/pubmed/9850057

You are welcome to contact us for more information!

臉書 Facebook
Le GENE 領先基因

香港領先基因

www.le-gene.com

Le GENE Lifestyle

LeGENE Personal Genetic Centre
Suite 1411-1413 Central Building, 1 Pedder Street, Central HK
www.le-gene.com Tel: 2327 1411 Fax: 2327 4108 Email: cs@le-gene.com