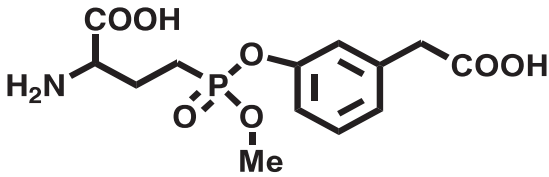


New component for Anti-Aging

NAHLSGEN®



INCI name: Methyl Carboxymethylphenyl
Aminocarboxy propylphosphonate

What is NAHLSGEN?

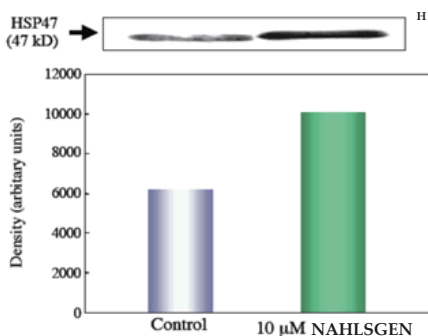
NAHLSGEN is new type of Anti-Aging care raw material which has been developed in the laboratory of **Kyoto University and Osaka City University**

How does it work?

NAHLSGEN provides a small amount of oxidative stress in the skin and then our own skin defense system is activated and produce own collagen internally. At the same time, A protein called *HSP 47 which is produced, this protein makes "Quality Collagen".

* HSP 47= HEAT SHOCK PROTEIN 47

HSP47 Production Promoting Effect



HSP47 is a necessary protein to make a correct triple helix of collagen, and also responsible to carry out the extracellular collagen biosynthesis in fibroblasts. It is an indicator of (production of elastin and collagen) activation of fibroblasts, in case the expression level of HSP47 is large, it shows that the fibroblasts are active in healthy

How much collagen is produced?

NAHLSGEN will revive collagen and elastin by activating the cells directly to encourage quiescent cell and collagen-function declined cell. It is a possible to produce the collagen from inside the body. That the production of collagen within the cell to 2-3 times, production of elastin is a component essential to the tension of the skin also increases to 1.5 times or more have been identified specifically.

Collagen production effect

Group	(%)
Control	100.0
114 μM Vitamin C	136.8
10 μM NAHLSGEN	190.0
10 μM NAHLSGEN + 114 μM Vitamin C	235.7 *synergetic effect

Elastin Production Promoting Effect

