

HYDROCOL

Resource to Restore a Youthful Skin

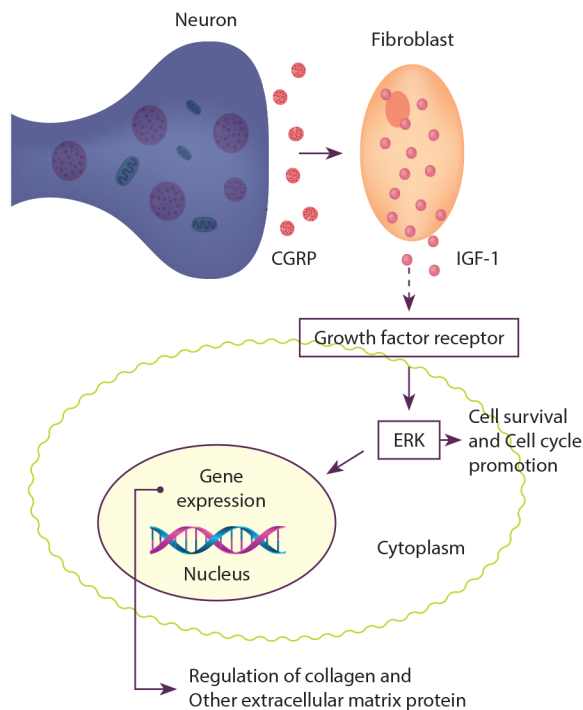


Marine animals could hold key to looking young

Sea urchins are able to change the elasticity of collagen with "messenger molecules" known as peptides, which is very similar to calcitonin, a hormone that regulates the stiffness of collagenous. Thus, Sea urchins can rapidly change their connective tissues and this is controlled by the nervous. HYDROCOL contains ingredients that stimulate the expression of calcitonin gene-related peptide (CGRP), and it can return the neuro-aged skin to the healthy stage. HYDROCOL can be used for the applications to fine lines, wrinkles typically found in aged, and environmentally damaged skin.



MECHANISM



The sensory neurons release calcitonin-gene related peptide (CGRP) on activation of vanilloid receptor (VR-1) by a wide variety of noxious physical and chemical stimuli. CGRP increases production of insulin-like growth factor-I (IGF-I).

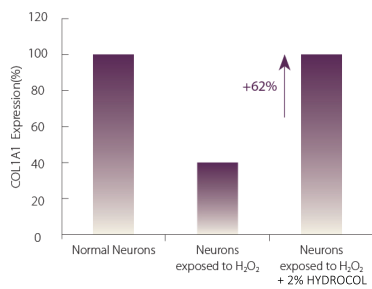
IGF-1 signaling has been linked to skin ageing and plays various important roles in cellular proliferation, differentiation, survival and functions of the cell. It upregulates the expression of collagen and inhibits the expression of matrix metalloproteinase (MMP-1), a collagenase that breaks down the collagen matrix in the dermis.

Thereby contributing to the maintenance of tissue integrity.

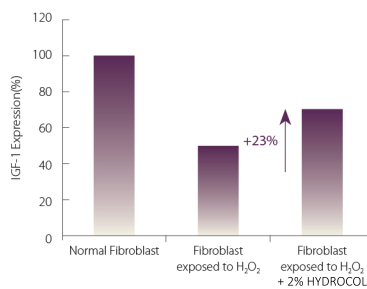
HYDROCOL maintains the metabolic activity of the youth skin by recovering the stiffness of the skin texture.

1. HYDROCOL promotes the release of neuropeptides weakened by aging, and maintains the vitality of the skin cells.
2. HYDROCOL regains the cell activity by stimulating the endogenous metabolism activator.
3. HYDROCOL increase the elasticity of the skin by stimulating the production of collagen and elastin.

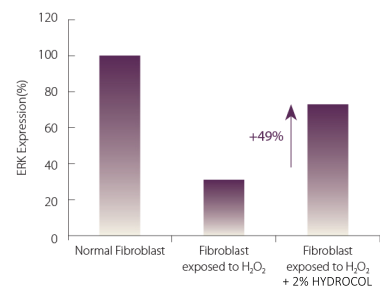
IN-VITRO : Fibroblast Vitality Enhancement



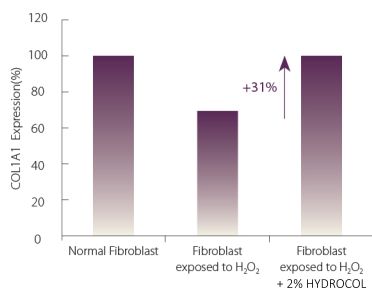
HYDROCOL INCREASES THE EXPRESSION OF CGRP



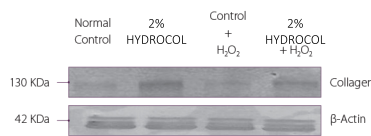
HYDROCOL INCREASES THE LEVEL OF IGF-1



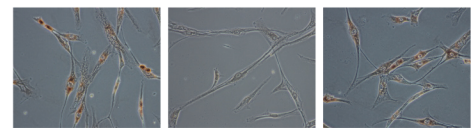
HYDROCOL INCREASES THE EXPRESSION OF ERK



HYDROCOL INCREASES THE EXPRESSION OF COL1A1



HYDROCOL INCREASES COLLAGEN



Normal fibroblasts Aged Fibroblasts Aged Fibroblasts + 2% HYDROCOL

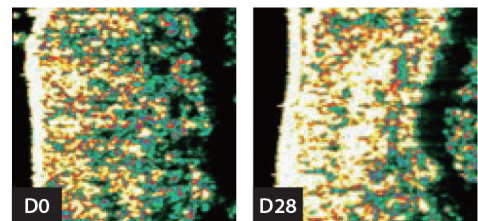
HYDROCOL REACTIVATES COLLAGEN SYNTHESIS

IN-VIVO : Skin Density Enhancement Effect & Anti Wrinkle Effect

HYDROCOL IMPROVES SKIN DENSITY

Method : Apply 2% Hyrocol Lotion for 4 weeks, and evaluate the desity in dermis and epidermis with Cortex Technology

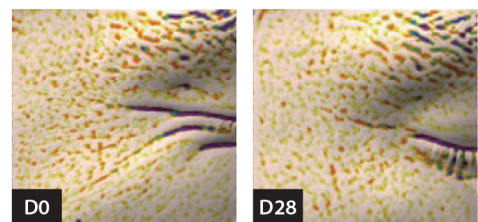
Hydrocol improves skin density in dermus and epidermis + 10.03% on average and up to + 72.66%



HYDROCOL REDUCES A CROW'S FEET

Method : Apply 2% Hyrocol Lotion for 4 weeks, and evaluate the crow's feet with Antera 3D (Miravex Limited)

Hydrocol reduces Crow's Feet -14.16% on average and Up to -35.5%



Cosmetic activities	<ul style="list-style-type: none"> • Promotion of CGRP expression in aged neurons • Enhancement of Fibroblast vitality • Stimulation of COL1A1 expression • Stimulation of Collagen production • Rejuvenation of Dermal stiffness
INCI name	<p>HYDROCOL Water (and) Butylene Glycol (and) Phenoxyethanol (and) Ethylhexylglycerin (and) Hydrolyzed Collagen</p> <p>HYDROCOL (HD) Water (and) Butylene Glycol (and) 1,2-Hexanediol (and) Hydrolyzed Collagen</p>
Recommended % of use	HYDROCOL 2% HYDROCOL (HD)2%