ANTI-AGING



Younger looking and rejuvenated skin

SKIN-ELASTICITY

**COLinus-P** 

INCI NAME : WATER / PROPANEDIOL / ARGININE / HYDROLYZED COLLAGEN

WOUND HEALING



#### GENERAL DESCRIPTION FOR RAW MATERIAL

Collagen is the main structural protein in the extracellular matrix found in the body's various connective tissues. Collagen consists of amino acids bound together to form a triple helix of elongated fibril known as a collagen helix. With age, the ability to replenish collagen naturally decreases by about 1.0-1.5% per year, over 50, Collagen levels start to decline rapidly, the collagen structure becomes more fragile and brittle leading to a weakening of the skin's structural support. The skin loses volume and firmness and starts to thin and wrinkle.

COLinus-P is a bio-mimetic collagen(COL1A2), 100% DNA sequence matches with the specific chain of Human COL1A2. It undergoes a division of the triple-helix collagen type 1 molecule into each Col1&2, duplicated the most efficient anti-aging part, which is COL1A2 and confirmed the collagen synthesis efficacy equal to or greater than TGF-β1 and EGF.

### **TECHNICAL INFORMATION**

#### Processing & Dosage

The recommended dosage of COLinus-P is  $0.1\% \sim 1\%$ . COLinus-P is a water-soluble active ingredient. In order not to disturb the structure and conformation of the actives, it is recommended to incorporate it into formula at the last phase of the formulation at about 40°C.

#### Storage & Shelf life

COLinus-P should be stored at refrigerated condition (2 ~ 6  $^{\circ}$ C) in a tightly closed and lightproof package for a long term storage. If stored in these appropriate conditions the shelf life is at least 24 months. Once the original packing is opened, it is highly recommended to use at once.

#### Safety information

The safety of ingredients is checked by in-vitro ocular test and 3D skin irritation test.

According to each tests result as below;

In-vitro ocular test (OECD TG 491) – No categorized for hazard classification that induce serious eye damage up to 5%.
3D skin irritation test (OECD TG 439) – No categorized for irritant classification up to 5%.

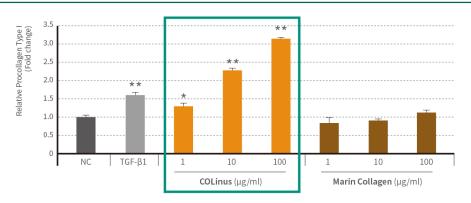
Based on the conclusion with the safety assessment, COLinus is believed as a safe material for cosmetic use.



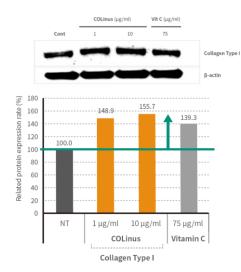


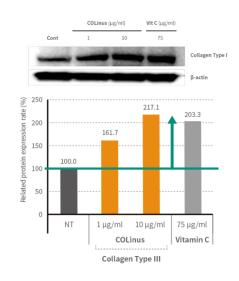
# Efficacy

## Procollagen type 1 expression (COLinus VS Marin collagen)

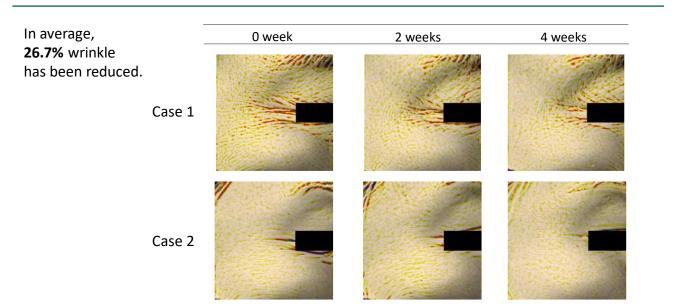


## Collagen type 1&3 protein expression





### Anti-wrinkle (Crow's feet)





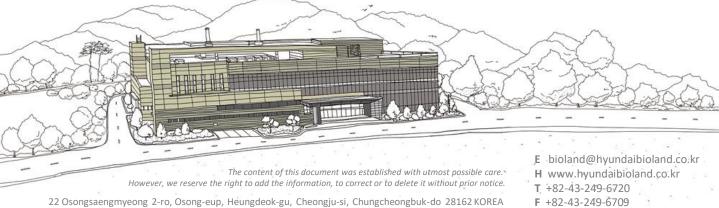


# **SPECIFICATION**

Appearance	Pale yellow liquid
Odor	Typical
pH (Neat)	6.5 ~ 8.5
Peptide Content (by BCA assay)	800 ~~ 1400ppm
Purity (by SDS-PAGE)	Not less than 70%
Heavy metal	Not more than 20ppm
Arsenic	Not more than 2ppm
Total bacterial count	Not more than 100cfu/g
Yeast & molds	Not more than 10cfu/g

## PRODUCT INFORMATION

COLinus-P	INCI Key Index
COMPOSITION (INCI Key Index)	A : Greater than 50%
	B : Greater than 25% but less than or equal to 50%
A	C : Greater than 10% but less than or equal to 25%
В	D : Greater than 5% but less than or equal to 10%
	E : Greater than 1% but less than or equal to 5%
F	F : Greater than 0.1% but less than or equal to 1%
	G : Less than or equal to 0.1%
	COMPOSITION (INCI Key Index) A B F



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