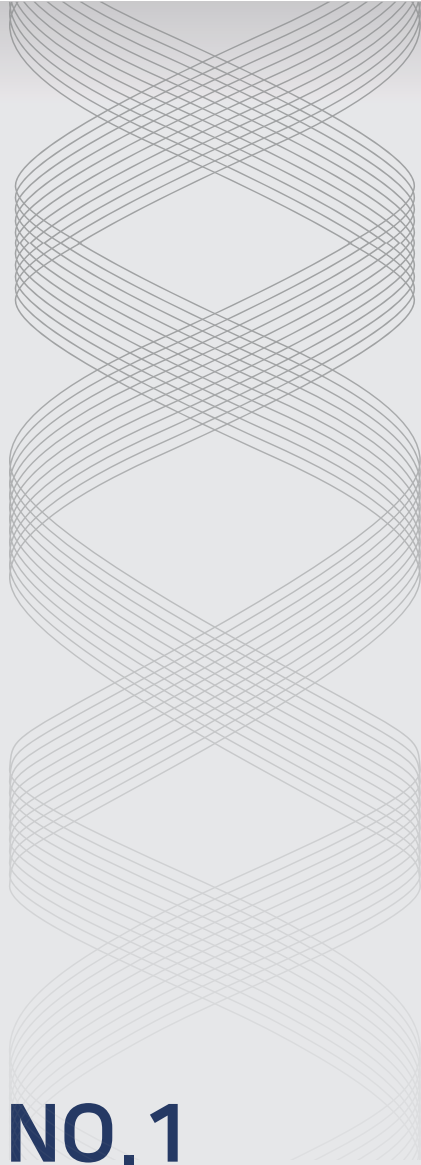


# K Booster



## NO. 1 SKIN BOOSTER

A New Standard Skin Booster  
For Skin Rejuvenation In Korea



When a flower doesn't bloom,  
you fix the environment in which it grows,  
not the flower

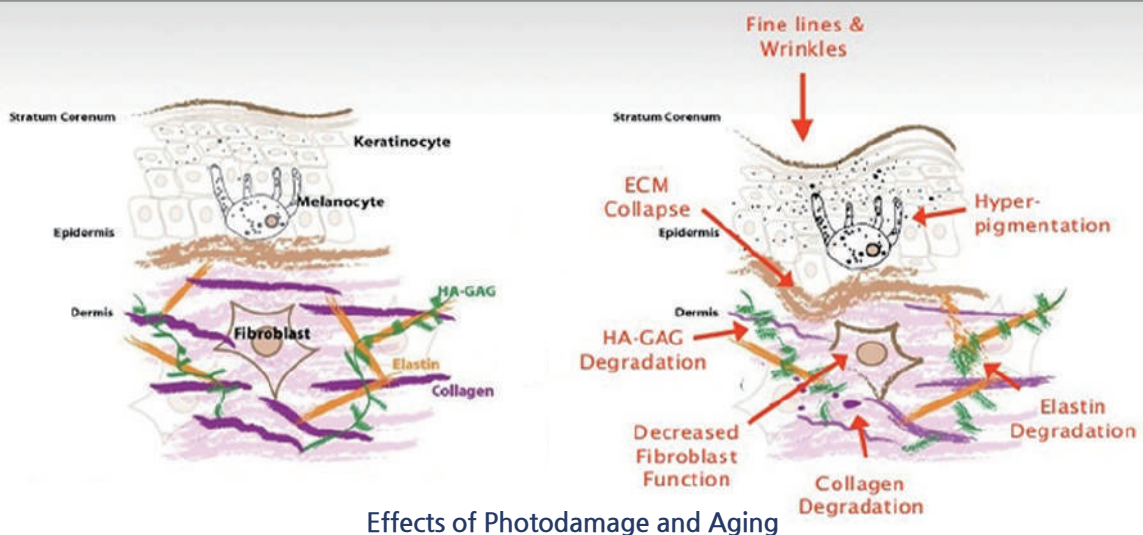
• Alexander Den Heijer •



## K-BOOSTER Can Improving of Dermal ECM Environment Ha+54 Essential Ingredient

Healthy Skin

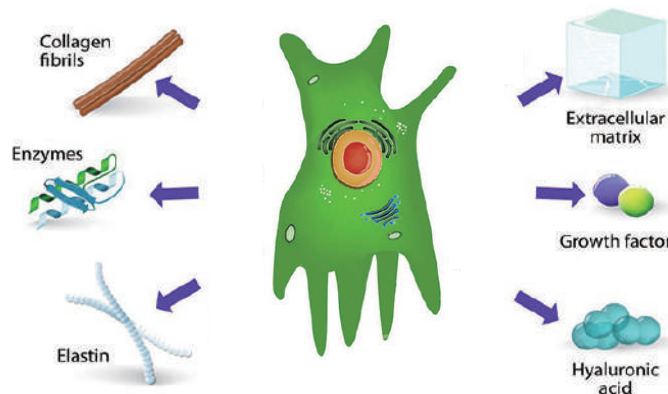
Aging Skin



Effects of Photodamage and Aging

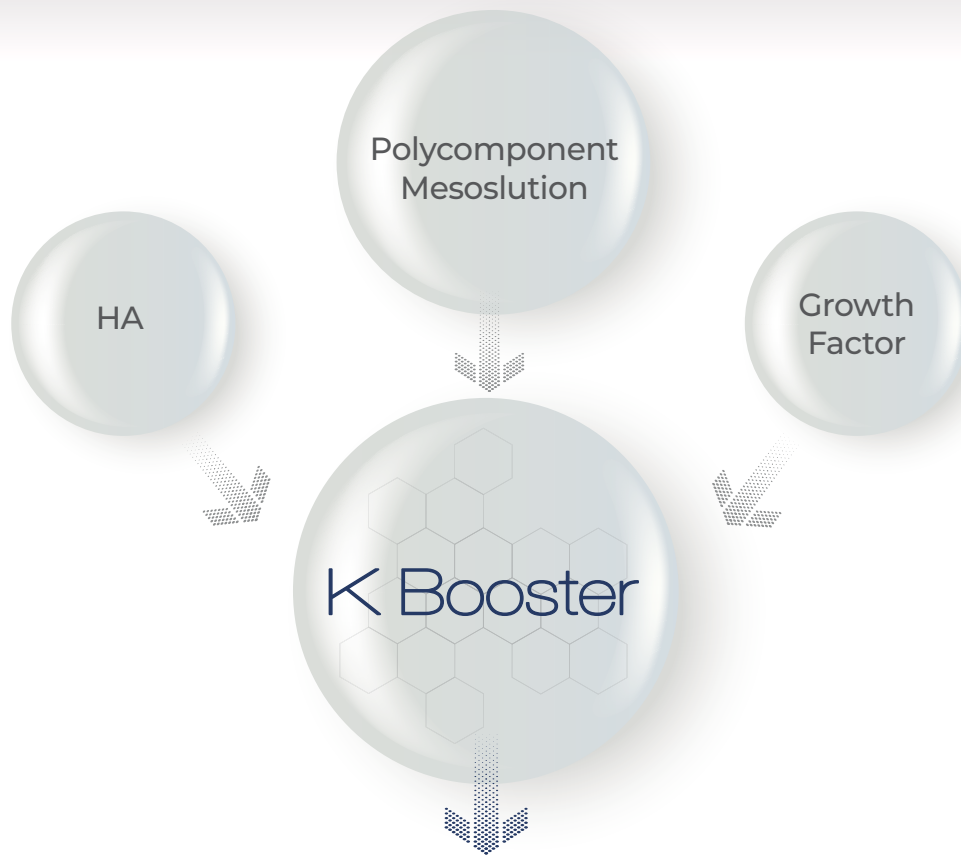
## K-BOOSTER is Optimal Biostimulating Formular for Dermal Fibroblast Growth Factor

Fibroblast Role



Fibroblast is a Key Maintainer of ECM Networks

# K Booster



## FIBROBLAST

Fibroblast Stimulation  
→ Collagen, Elastin Formation

## K Booster indication

- + for men and women of all skin type
- + for people with younger or more mature skin
- + for the face, neck, hands & décolletage
- + for people improve acne scarred or photodamaged skin



# K Booster

## 01 K-Booster A (AQUA)

### ▶ **INCLUDE** : 4 kinds of Growth factors

+ Hyaluronic acid (0.3%) + 12 Vitamines + EGF/ IGF-1/ bFGF /AQP  
24 Amino acids  
6 Co-enzymes  
6 Minerals  
5 Nucleic acid  
1 Anti-oxidant

### ▶ **INDICATION** :

- ✓ Skin Hydration
- ✓ Improve Radiance
- ✓ **Skin Revitalization**
- ✓ **Biostimulation of Dermal Fibroblast**



## 02 K-Booster W

### ▶ **INCLUDE** : 2 kinds of Growth factors

+ Hyaluronic acid (0.5%) + 12 Vitamines + Citrus Junos Callus Extract  
24 Amino acids + Pyrus Serotina Callus Extract  
6 Co-enzymes  
6 Minerals  
5 Nucleic acid  
1 Anti-oxidant

### ▶ **INDICATION** :

- ✓ Hydration
- ✓ Radiance
- ✓ Improve Skin Tone
- ✓ **Reduce Melasma**



Provides optimal environment  
for skin cells

A new concept solution that creates an environment that helps grow cells. It provides an abundant nutrient and proper pH concentration, osmotic pressure, etc. for skin cells to grow well, creating an environment where healthy skin cells can grow and grow.

# K Booster

## 03 K-Booster R (REJUVENATION)

### ▶ **INCLUDE** : 20 kinds of Growth factors

- |                          |                |                                 |
|--------------------------|----------------|---------------------------------|
| + Hyaluronic acid (0.5%) | + 12 Vitamines | + EGF/ IGF-1/ bFGF/ AQP/ aFGF/  |
|                          | 24 Amino acids | VEGFA/ PDGFA /PDGFB/ PGF /SCF/  |
|                          | 6 Co-enzymes   | COL3A1/ KGF/ hGH /HSP70/ SIRT1/ |
|                          | 6 Minerals     | SIRT2/ SOD /TRX/ TGF-b1/ TGF-b3 |
|                          | 5 Nucleic acid |                                 |
|                          | 1 Anti-oxidant |                                 |

### ▶ **INDICATION** :

- ✓ More Powerful Hydration
- ✓ Rediance & Revitalization
- ✓ Biostimulation of Fibroblast,
- ✓ **Remove Fine Line**
- ✓ **Scar Treatment**



## 04 K-Booster PDRN PLUS

### ▶ **INCLUDE** : 20 kinds of Growth factors

- |                          |                |                                 |              |
|--------------------------|----------------|---------------------------------|--------------|
| + Hyaluronic acid (0.5%) | + 12 Vitamines | + EGF/ IGF-1/ bFGF/ AQP/ aFGF/  | <b>+PDRN</b> |
|                          | 24 Amino acids | VEGFA/ PDGFA /PDGFB/ PGF /SCF/  |              |
|                          | 6 Co-enzymes   | COL3A1/ KGF/ hGH /HSP70/ SIRT1/ |              |
|                          | 6 Minerals     | SIRT2/ SOD /TRX/ TGF-b1/ TGF-b3 |              |
|                          | 5 Nucleic acid |                                 |              |
|                          | 1 Anti-oxidant |                                 |              |

### ▶ **INDICATION** :

- ✓ Massive Hydration
- ✓ Rediance & Revitalization
- ✓ Biostimulation of Fibroblast
- ✓ Boost cell renewal
- ✓ Collagen generation
- ✓ Minimize Pores
- ✓ **Remove Wrinkles and Scars**
- ✓ **Increase Skin Volume**



# K Booster

## Development Background

We want to develop an optimal solution to improve the ECM environment of the dermis and to promote the growth of human keratinocytes to suppress aging.

- 01 K-complex optimal combination : The optimal booster combination was found through cell testing of various combinations of booster.

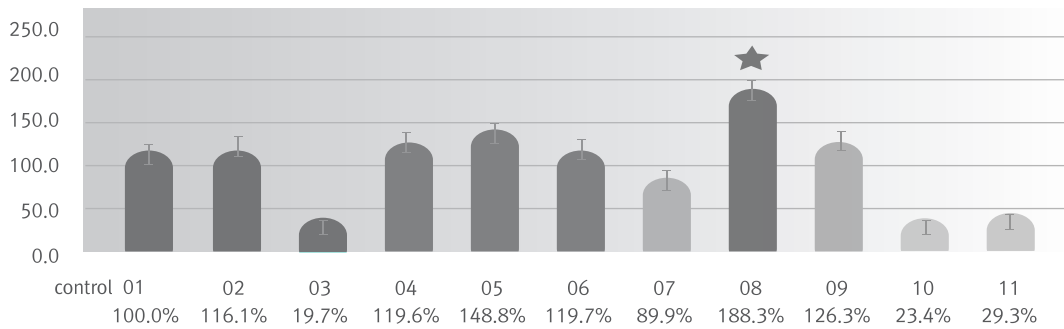


Fig 1. The effect of K-Complex on human keratinocytes

The cytotoxicity and cell proliferation of human keratinocytes were tested by MTT assay. As a result, it was confirmed that the combination of No. 8 test group showed about 180% cell proliferation ability compared with the control group.

- 02 Comparative test : As a result of comparing with the product of A company, K-complex was not cytotoxic even in 50% treatment group.

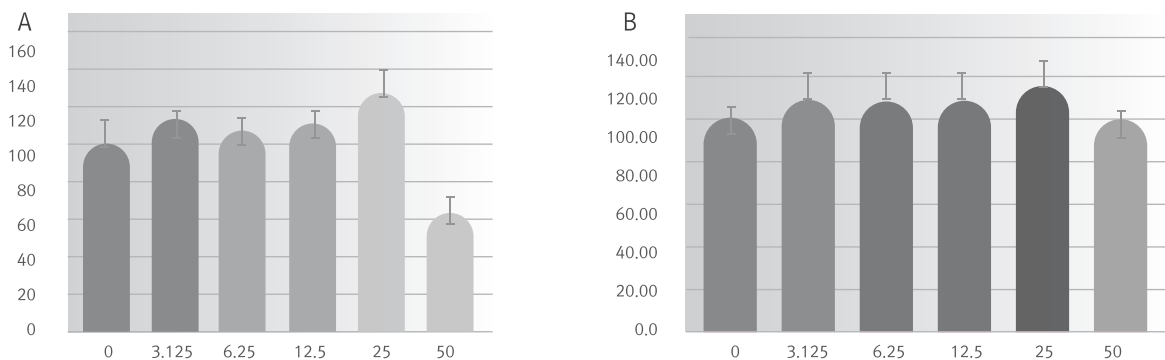


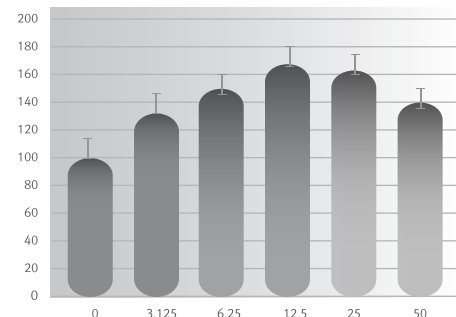
Fig 2. Comparison of K-Complex with product A

A comparative test of the basic base composition of product A (A) and K-Complex (B) was tested in human keratinocytes. As a result, it was confirmed that K-Complex does not show cytotoxicity even at a higher concentration than the product A.

- 03 Optimization of K-Booster I : For maximize cell proliferation, K-complex combined with optimal combination of growth factors. It was branded as K-Booster.

Fig 3. Effect of K-Booster on human keratinocytes (1)

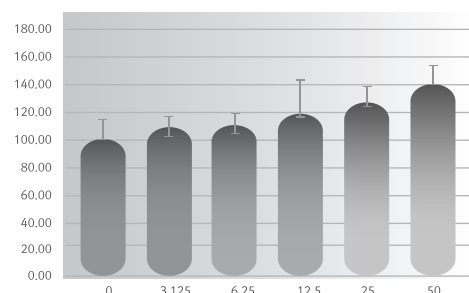
In order to enhance the efficacy of the K-Complex, the growth factor was tested in human keratinocytes by adding growth factors at an optimal ratio. As a result, it was confirmed that the cell proliferation effect was significantly enhanced when treated with the growth factor, rather than adding K-Complex alone.



- 04 Optimization of K-Booster II : It improves product quality through sterilization process and is safer to skin.

Fig 4. Effect of K-Booster on human keratinocytes (2)

In order to commercialize K-Booster, 1,2-hexanediol was prescribed to confirm efficacy in the final product. As a result, it was confirmed that cell proliferation is promoted even in the final product.



# K Booster

## Cell Test

- 05 Promotes skin cell proliferation and activity The K-booster solution was treated up to 50% in human keratinocytes, Cell proliferation increased by about 40% compared to the control group.

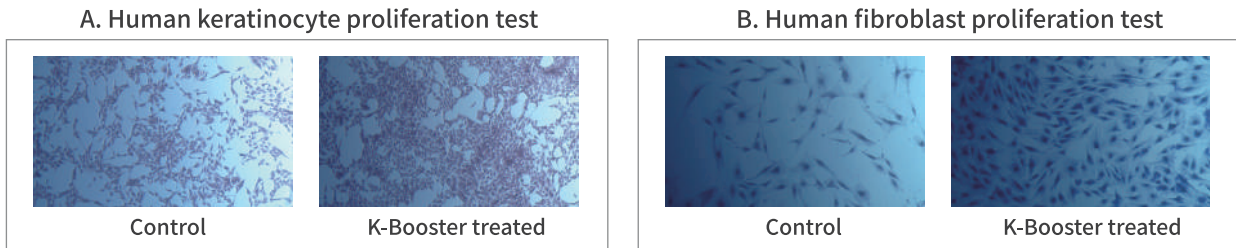


Fig 5. Effect of K-Booster on human skin cells The proliferative potential of K-Booster in human skin cells was visually observed. As a result, the cell proliferation was significantly promoted in the K-Booster test group.

- 06 Promotes skin cell proliferation and activity Promoting skin cell wound regeneration : K-Booster promotes wound regeneration in a concentration-dependent manner.

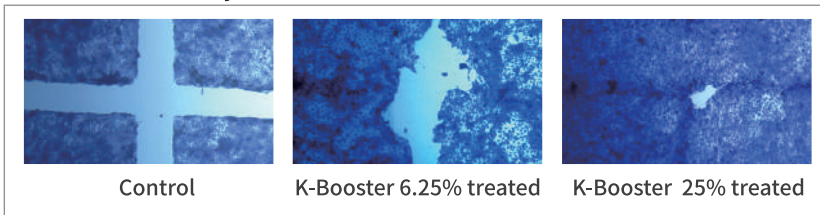


Fig 6. Effect of K-Booster on wound regeneration in human keratinocytes

The wound regeneration effect of K-Booster in human keratinocytes was examined. As a result, it was confirmed that the wound regeneration rate was remarkably faster in the K-Booster 25% test group as compared with the control group.



# K Booster



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