

REMASTERED
FRAGMENTS

COL-4-FRAG™

WEAVING THE COLLAGEN NET

in-cosmetics™
asia
Innovation Zone
Best Ingredient
Award 2023
SHORTLISTED



Collagen IV fragment
produced in Wild plants



Collagen net



V-neckline
beauty



WILD PLANTS
AS BIOFACTORIES

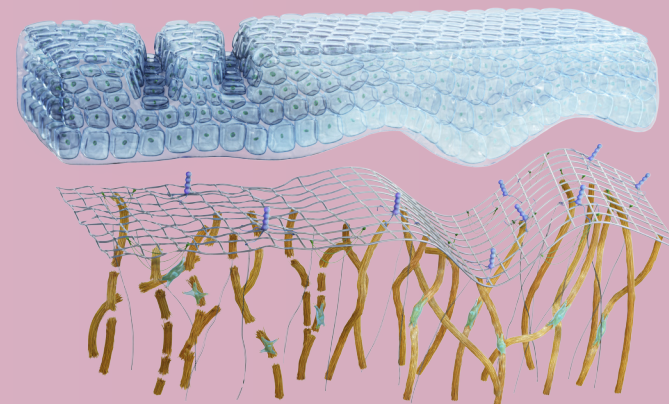
DESCRIPTION & MECHANISM

Col-4-Frag remastered™ the newest addition of the **Remastered Fragments line**, is a sustainable and **biomimetic to human** collagen IV fragment produced by Wild plants as biofactories through **vertical farming**

The neckline is one of the most captivating areas, however, it is also quite susceptible to external factors and is often overlooked in our daily skincare routine. To achieve a greater boost of confidence and a **V-neckline beauty**, it is necessary to enhance it from within by tightening and weaving the collagen IV net with **Col-4-Frag remastered™**

Col-4-Frag remastered™ acts on the **collagen IV net** by intervening in its synthesis & anchoring thanks to **perlecan & collagen type VII**. This helps to form more interdigitations in the **DEJ** (Dermo-Epidermal Junction), promoting the **nourishment** and **tightness** of dermis and epidermis. As a result, you can enjoy a smooth and **flawless neck and décolleté** with less **wrinkles** and **dark spots**

Join the **fragments revolution** and weave your collagen net to enhance your natural neckline beauty



- **Non-GMO**
- **Recommended dose:** 1-2%
- **Solubility:** Water soluble

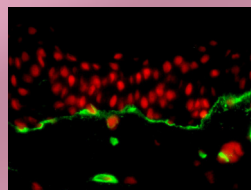
LIPOTRUE
science & biotechnologies

IN VITRO & HUMAN EXPLANTS EFFICACY

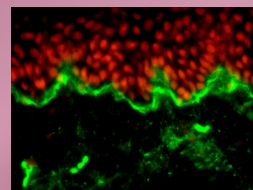
Type IV collagen net

+60% collagen IV vs non-treated explants

Up-regulation of collagen IV gene



Non-treated
(collagen IV in green)



1% Col-4-Frag remastered™
(collagen IV in green)

Key collagen net anchoring

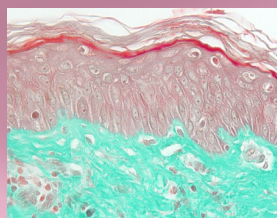
+200% collagen VII vs non-treated explants, lower net anchoring to the dermis

+33% perlecan, upper net anchoring to the epidermis

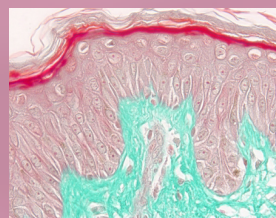
Up-regulation of collagen net adhesion genes

Boosting dermo-epidermal junction

+15% DEJ relief index vs non-treated explants, DEJ more wavy



Non-treated



1% Col-4-Frag remastered™

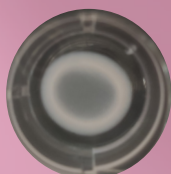
Rejuvenating epidermis & dermis

+35% cell epidermal adhesion

+60% keratin 15 marker of keratinocytes regeneration

Fibroblasts renewal improvement with time

+36% ECM contractility vs basal



Basal



1 ug/mL Col-4-Frag remastered™

IN VIVO EFFICACY

Weaving the collagen IV

43 women (44-80 years old) with **visible signs of aging in décolleté and severe neck sagging** applied a cream with **2% Col-4-Frag remastered™** on neck & décolleté, twice daily for 56 days

-21% neck wrinkle volume in 56 days

-8% neck wrinkle depth in 56 days

T0 days



T56 days



-15% wrinkle depth

-15% décolleté wrinkle's number in 28 days

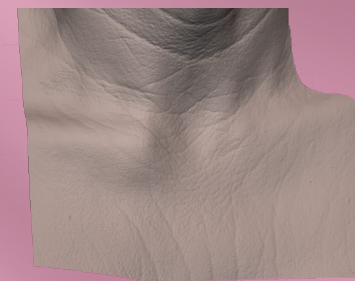
-19% décolleté wrinkle volume in 28 days

+15% décolleté firmness in 7 days

T0 days



T56 days



-26% wrinkle number
-16% wrinkle volume

-15% décolleté dark spots perimeter in 28 days