

Bio-fermented Vegan Collagen MSE



Improves skin
elasticity



Increases
epidermis thickness

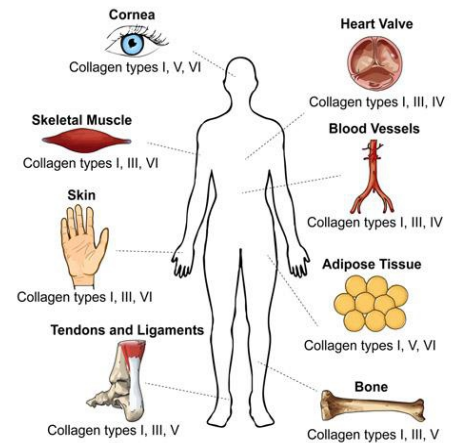
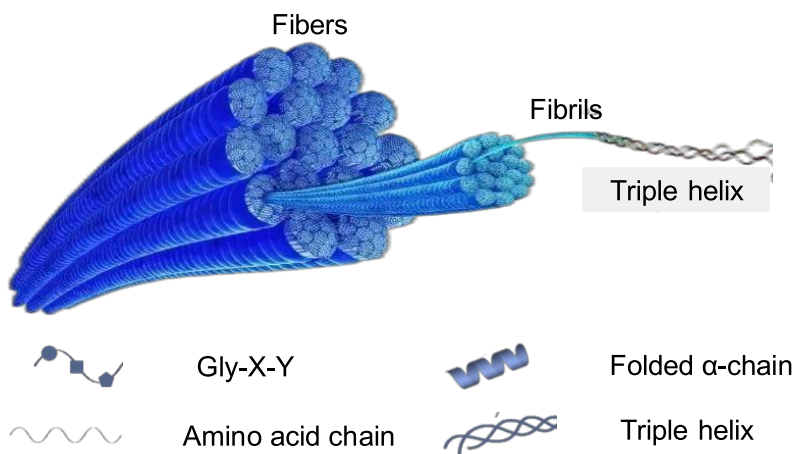


Anti-wrinkle

Meteoric
Cosmeceuticals

Beauty Meets Brilliance in Biotech

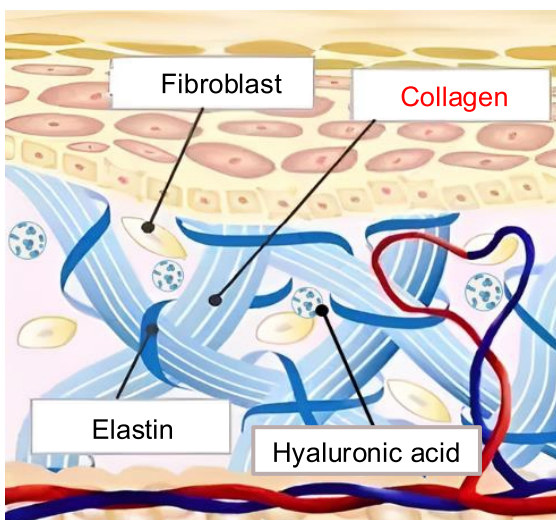
- Collagen accounts for 30%-40% of the body's proteins and approximately 70% of the dry weight of the skin.
- It is present in various tissues throughout the body, including the skin, cartilage, tendons, and internal organs.
- Currently, about 29 types of collagen have been identified from more than 40 vertebrate species.



Reference: Bielajew BJ, Hu JC, Athanasiou KA. Collagen: quantification, biomechanics, and role of minor subtypes in cartilage. Nat Rev Mater. 2020;5(10):730-747.

Collagen in the skin

Collagen accounts for 75% of the total components of the skin,
forming the reticular support structure of the dermis



THE EXTRACELLULAR MATRIX (ECM)

Dense connective tissue of the skin providing strength, extensibility and elasticity

Fibroblasts secrete the majority of the ECM

MAJOR COMPONENTS

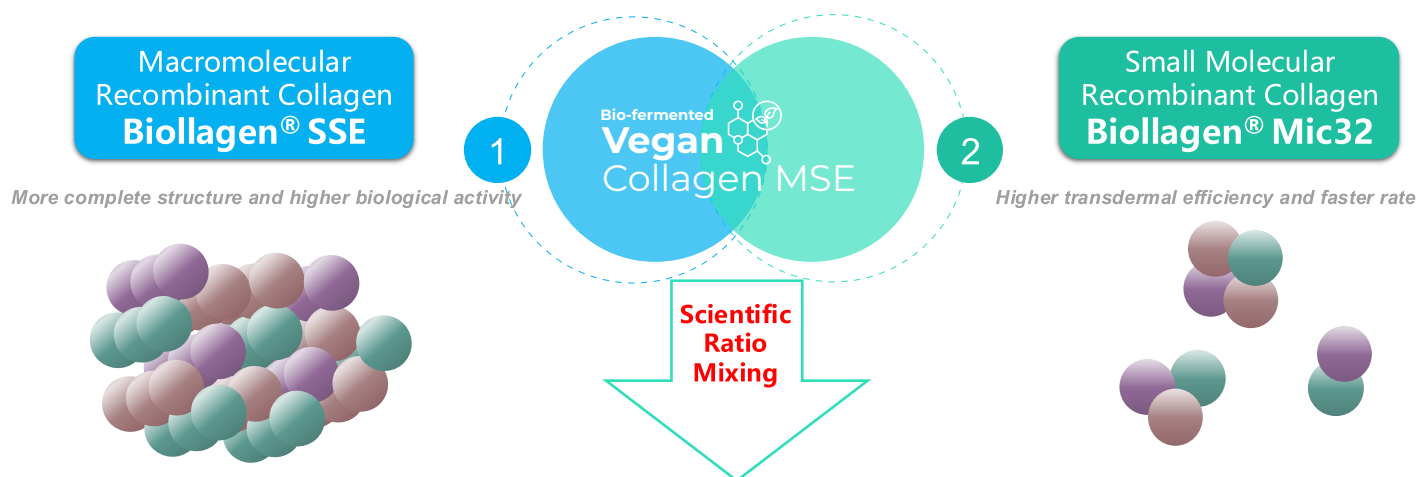
Collagen: It can provide a scaffold for fibroblasts, anchoring and supporting cells while providing an appropriate growth environment

Elastin: As the connecting structure of collagen fiber networks, it imparts elasticity to the skin

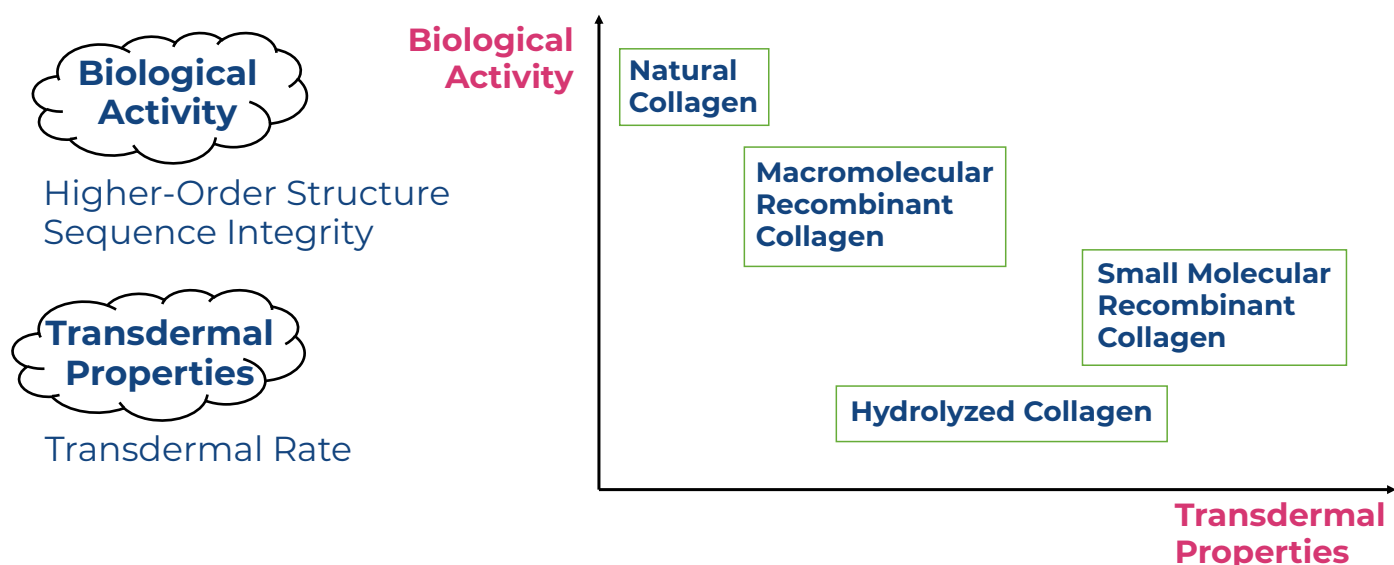
Hyaluronic acid: Located between fiber bundles and cells, its main function is to maintain skin moisture. Fibroblasts secrete the majority of the ECM

Reference: Shin, Jung-Won., Kwon, Soon-Hyo., Choi, Ji-Young., Choi, Ji-Young., Na, Jung-Im.. Molecular Mechanisms of Dermal Aging and Antiaging Approaches. International journal of molecular sciences, 2019, 20(9)

Please turn for more



Different Characteristics of Collagen



Efficacy

In vivo Clinical test

Test Category:

Human efficacy test (anti wrinkle, firming, nourishing, and repairing)

Test Method:

Efficacy of 42 consecutive days' use of facial cream (anti-wrinkle, firming, nourishing, and repairing)

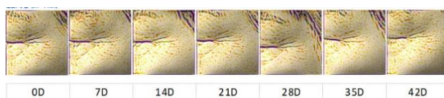
Group	Sample No.	Sample Name	Formula Code	Expiry Date	Color and Physical State	Specification and Quantity	Package
Group 1	YL20220908-(A)	A-cream	Y2022033101G	March 30, 2025	White cream	30 g/vial, 10 vials	vial
	YL20220908-(B)	B-cream	Y2022033102G			30 g/vial, 10 vials	vial
Group 2	YL20220908-(C)	C-cream	Y2022033103G			30 g/vial, 10 vials	vial
	YL20220908-(D)	D-cream	Y2022033104G			30 g/vial, 10 vials	vial

Efficacy



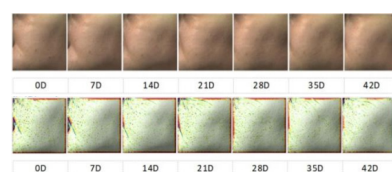
Overall wrinkle size reduction

D-cream (23.45%)>C-cream (17.57%)>B-cream (13.15%)>A-cream (5.10%)



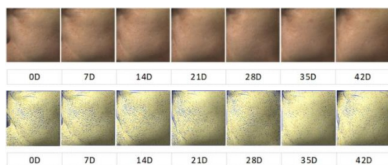
Improvement rates of wrinkle depth

D-cream (23.96%)>C-cream (19.35%)>B-cream (14.59%)>A-cream (6.21%)



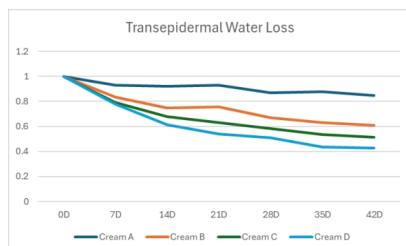
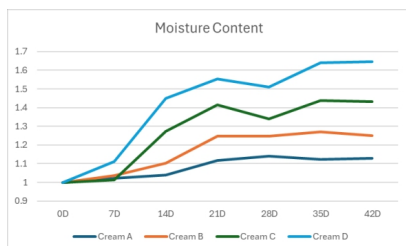
Improvement rates of the skin texture roughness

D-cream (22.91%)>B-cream (20.48%)>C-cream (16.59%)>A-cream (8.97%).



Improvement rates of the skin pore volume

D-cream (67.26%)>B-cream (57.94%)>C-cream (50.25%)>A-cream (18.36%)

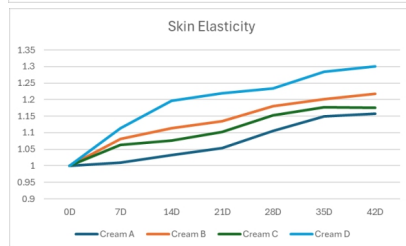


Improvement rates of the skin moisture content

D-cream (64.52%)>C-cream (43.25%)>B-cream (25.08%)>A-cream (12.89%).

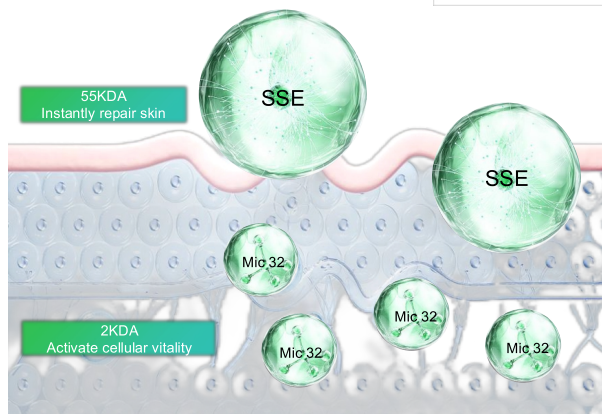
Improvement rates of transepidermal water loss (TEWL)

(Top Right) D-cream (57.36%)>C-cream (48.72%)>B-cream (39.11%)>A-cream (15.40%).



Improvement rates of skin elasticity

(Bottom Right) D-cream (30.11%)>B-cream (21.69%)>C-cream (17.53%)>A-cream (15.70%)



Transepidermal Water Loss (TEWL) – 57.36%

Pore Volume -67.26%

Wrinkle Depth -23.96%

Elasticity +30.11%

Moisture Content +64.52%

Raw Material Information

Product Name	Characteristics	INCI	Ingredients	Efficacy	Recommended Addition Amount
Bio-fermented Vegan Collagen MSE	White or almost white powder	Sh-polypeptide-123. Hydrolyzed sh-Polypeptide-123	Biollagen® SSE: 20%-35% Biollagen® Mic32: 65%-80%	Reduces wrinkles and fine lines, repairs the skin barrier, smoothens the skin	Cream/Lotion: 0.001-1%; Essence: 0.1%-3%