

Tulsisome™

Plant-Derived Exosomes
for Advanced Anti-Aging
Skincare



INCI

Ocimum Tenuiflorum
Callus Culture Lysate

- Mild scent
- Plant based
- Water soluble

1-5%

Usage level

- 100% natural
- Vegan
- Made in the USA
- cGMP-produced

Traditional Ingredients: Green Tea Extract (EGCG), Curcumin, Anti-inflammatory botanicals, Niacinamide, Resveratrol, Centella Asiatica Extract, Bisabolol

Typical Performance Profile: Traditional botanical anti-inflammatory ingredients typically reduce redness and oxidative stress.

Tulsisome Positioning: Tulsisome contains metabolites including curcumin derivatives, asiatic acid, and hydroxytyrosol associated with inflammation balance, sebum regulation, and collagen-support pathways.

Ideal Applications

- Anti-aging serums
- Eye treatments
- Post-procedure skin soothing
- Barrier repair creams
- Brightening masks
- Clean/vegan skin tech formulations

Next-Generation Key Ingredient

Tulsi Stem Cell Exosomes are a plant-based cellular communication system derived from the *Ocimum sanctum* (Holy Basil) Stem Cells.

Engineered through advanced botanical biotechnology, they deliver regenerative signals to the skin without the ethical, sourcing, or immunogenic concerns associated with human-derived exosomes.

This powerful key ingredient is ideal for use in anti-aging serums, eye creams, masks, and recovery formulas — offering biomimetic rejuvenation in a clean, bio-compatible format.

Tulsisome™ combines the wisdom of botanicals with the precision of regenerative science

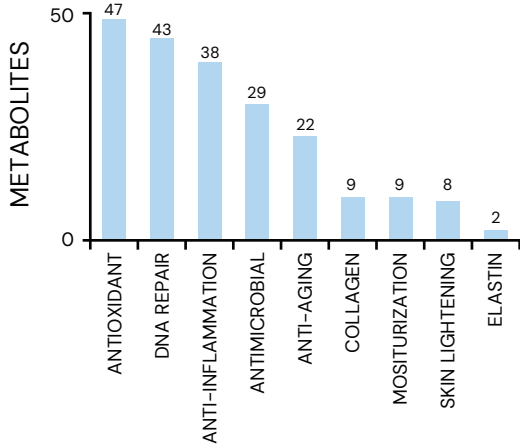
- **Tulsi (Holy Basil)** is a revered adaptogen in Ayurvedic medicine, with a history of supporting the body's **anti-inflammatory and antioxidant responses, as well as skin-soothing properties.**
- **Exosomes** are naturally occurring extracellular vesicles that carry **metabolites, peptides, and lipids** — enabling intercellular communication and **epidermal regeneration.**

Key Benefits

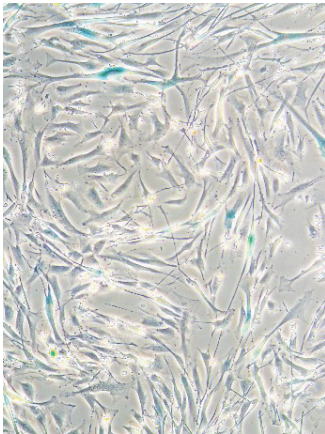
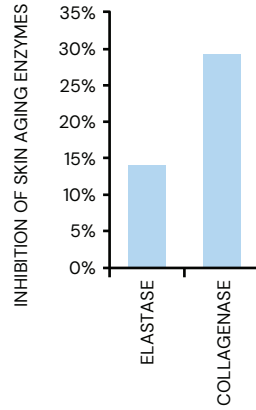
- **Skin Renewal:** Supports cellular turnover and collagen production
- **Anti-inflammatory:** Supports the body's response to inflammation, which can help calm the appearance of redness, and sooth irritation
- **Anti-aging:** In vitro testing show reduction in collagen and elastin degradation
- **Firms & Smooths:** Improves the appearance of skin elasticity
- **Brighter Looking Skin:** Helps improve the appearance of dull and uneven-looking skin
- **Product Penetration:** Delivers key ingredient deeper for superior efficacy

In Vitro Testing Results

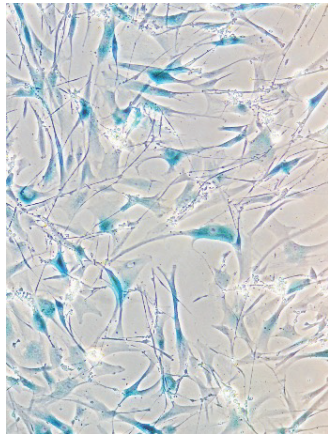
Using AI-modeling we have identified bioactive metabolites that are naturally produced by **Tulsisome™** culture known to be involved in various beneficial activities to human skin. Graph shows the number of bioactive metabolites naturally found in **Tulsisome™**



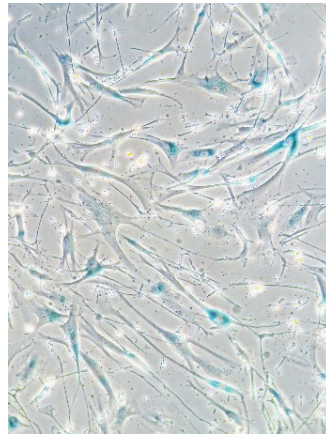
The chart illustrates the inhibitory effect of **Tulsisome™** on skin enzymes that degrade collagen and elastin. These in vitro results suggest visible cosmetic anti-aging benefits.



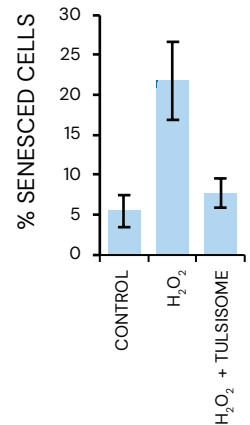
CONTROL



OXIDATIVE STRESS (H₂O₂)



OXIDATIVE STRESS (H₂O₂)
+ TULSISOME



Anti-aging effect of **Tulsisome™** on human skin cells. Human melanocytes were treated with hydrogen peroxide (H₂O₂) and stained with a senescence biomarker (blue). Graph shows the percent of stained (senesced) cells. Note the reduced number of senescent cells when **Tulsisome™** was added.

Advantages Over Human-Derived Exosomes

Shikasome	Human-derived exosomes
Plant-based	Human cell-derived
Non-immunogenic	Risk of immune response
Ethically sourced	Regulatory ambiguity
Stable & scalable	Batch variability
Vegan friendly	May not meet beauty standards
Accepted globally	Regulatory restrictions in some regions