

AKOSKY™ **VANITY**

Akott®
Evolution
DANCE & CHEMISTRY

FROM THE **POWER**
OF **MICROALGAE**
THE **FIRMING** ACTIVE
THAT RESTORES
SKIN ELASTICITY

THE CONCEPT

Skin Elasticity

With age, the adhesion forces between skin cells are reduced. This phenomenon decreases the structural network in the extracellular matrix (ECM) and leads to a **reduction of skin firmness and elasticity with consequent wrinkles formation.**

Akott has discovered the cosmetic properties of **Nannochloropsis granulata**, one of the most recent microalgae species identified in the North Sea, and developed **AKOSKY™ VANITY**, the first cosmetic Active ingredient produced with this source.

Nannochloropsis granulata grows inside bioreactors and takes advantage of the photosynthetic process, which uses the sunlight as a natural energy source for CO₂ up-cycling.

Controlled growth conditions maximise bioactive secondary metabolites biosynthesis in the cells that, when applied on skin, **stimulate structural ECM proteins production in the dermis.**

ORIGIN

Microalgae Nannochloropsis granulata Concentrate

ECO SUSTAINABLE SOLUTION

The microalgae *Nannochloropsis granulata* biomass is produced in photobioreactors under controlled conditions to enrich the cells in the desired bioactive secondary metabolites without affecting the environmental biodiversity. The microalgae cultivation is environmentally friendly and it is based on the photosynthetic mechanism that uses the sunlight as a source of energy and CO₂ as a source of carbon for a natural up-cycling process.

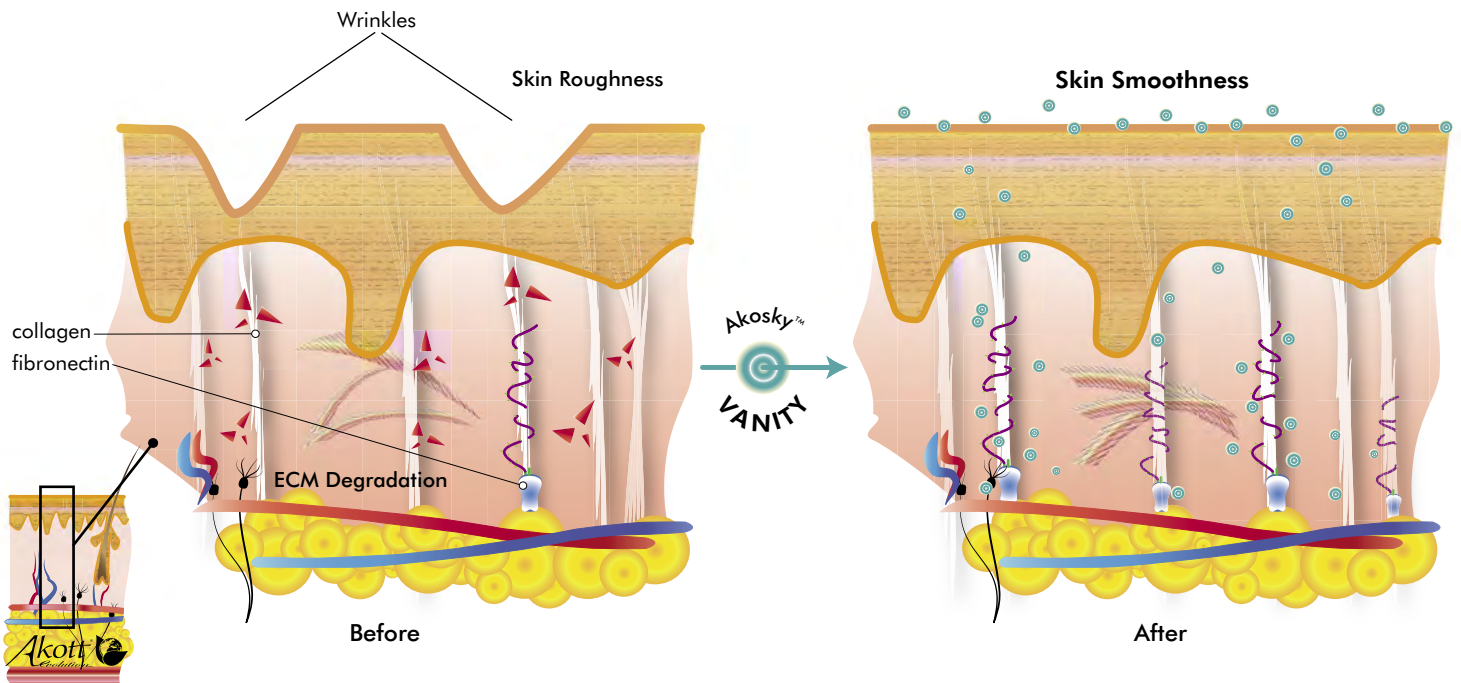
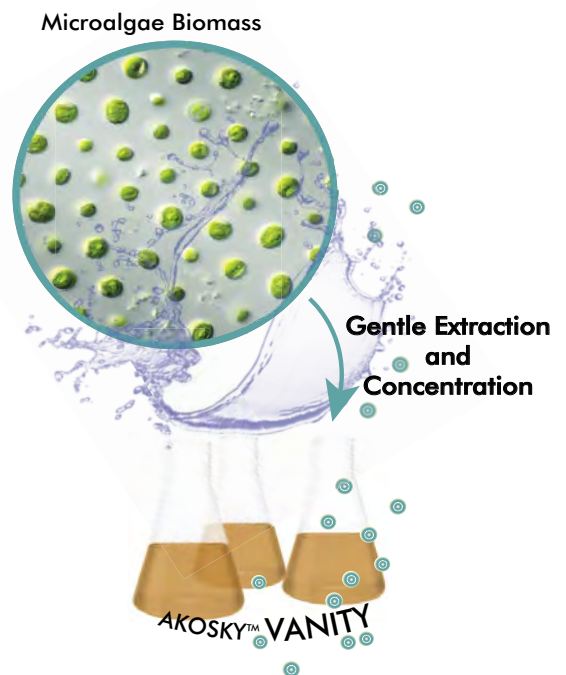
EFFICACY

In vitro testing shows a boost in **Pro-Collagen I, Collagen I, and Fibronectin** production in the ECM.

Clinical studies show significant **increase in skin firmness and elasticity and anti-wrinkle effect** after 28 days.

MECHANISM OF ACTION

The large pool of proteins, polyphenols, and carbohydrates present in **AKOSKY™ VANITY** synergistically stimulates the ECM structural proteins production with visible improvement in skin elasticity and fading away of wrinkles.

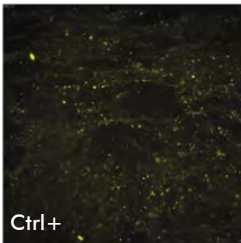
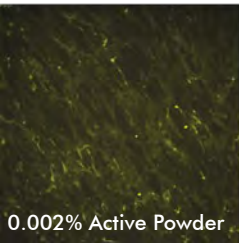
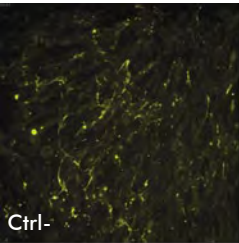


EFFICACY EVALUATION

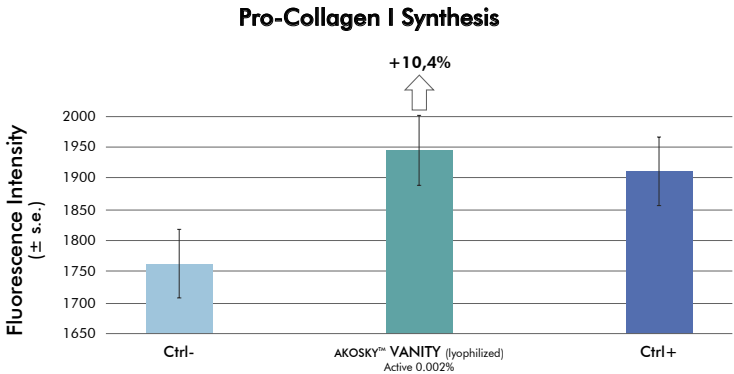
RESULTS

LABORATORY STUDY (*in vitro*)

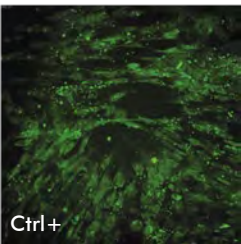
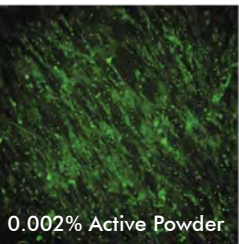
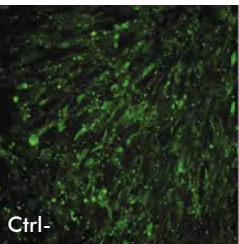
Pro-Collagen I, Collagen I, and Fibronectin protein expression levels were quantified with immunofluorescence assay in primary Human Skin Fibroblasts upon incubation with 0.002% pure **AKOSKY™ VANITY** Active Powder. A significant increase in the ECM protein levels was observed.



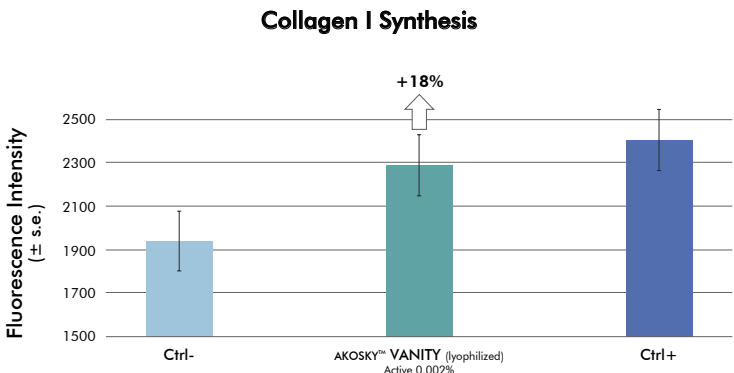
Pro-Collagen I
is the precursor of Collagen I.
It is structurally modified
to become **mature Collagen**.



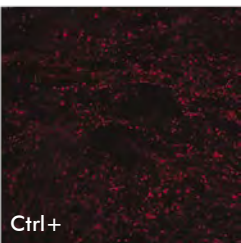
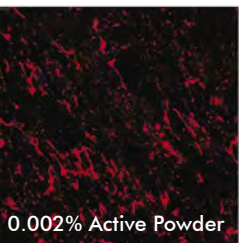
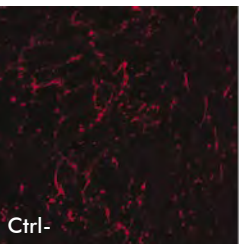
AKOSKY™ VANITY efficiently stimulates Pro-Collagen I synthesis



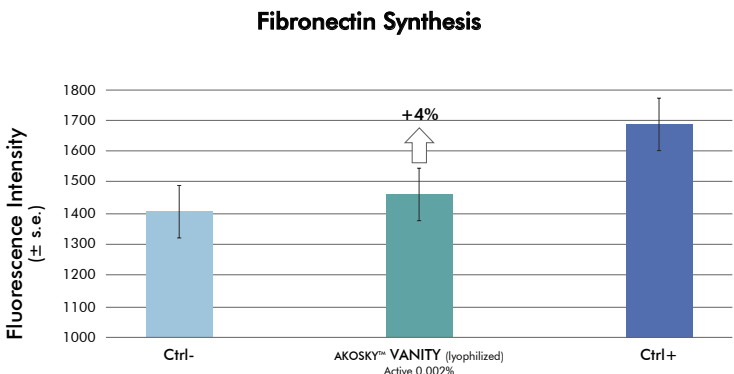
Collagen I
is the main structural protein
in the extracellular matrix.
It provides **firmness and elasticity**
to the skin.



AKOSKY™ VANITY efficiently stimulates Collagen I synthesis



Fibronectin
is an important glycoprotein
present in the extracellular matrix.
It plays a major role in
cell adhesion, migration, differentiation,
and wound healing.



AKOSKY™ VANITY stimulates Fibronectin synthesis

Protein expression levels in the presence of **AKOSKY™ VANITY** Active Powder have been compared to the ones of untreated samples (Ctrl-). Measurements have been performed in triplicates. Values are statistically significant ($p < 0.05$).

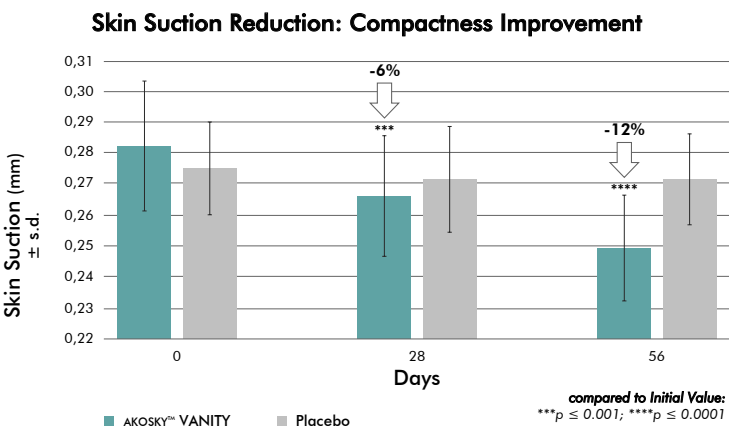
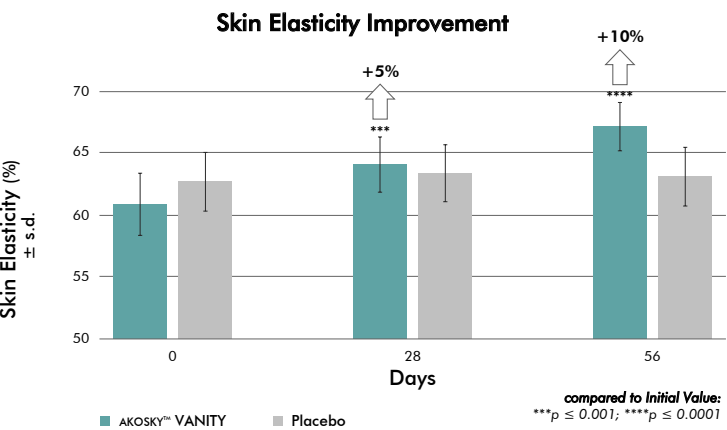
EFFICACY EVALUATION

RESULTS

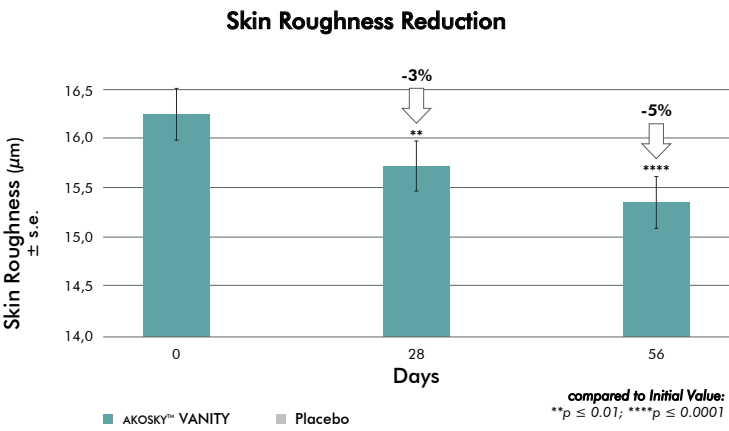
CLINICAL STUDY

30 female volunteers, (age 40-70 years old) with wrinkles and not elastic skin, were divided into two groups of equal number. The first group applied a gel containing **AKOSKY™ VANITY** at 2%, the other one applied a placebo formulation. Application was on clean face, in the morning and in the evening, for 2 months.

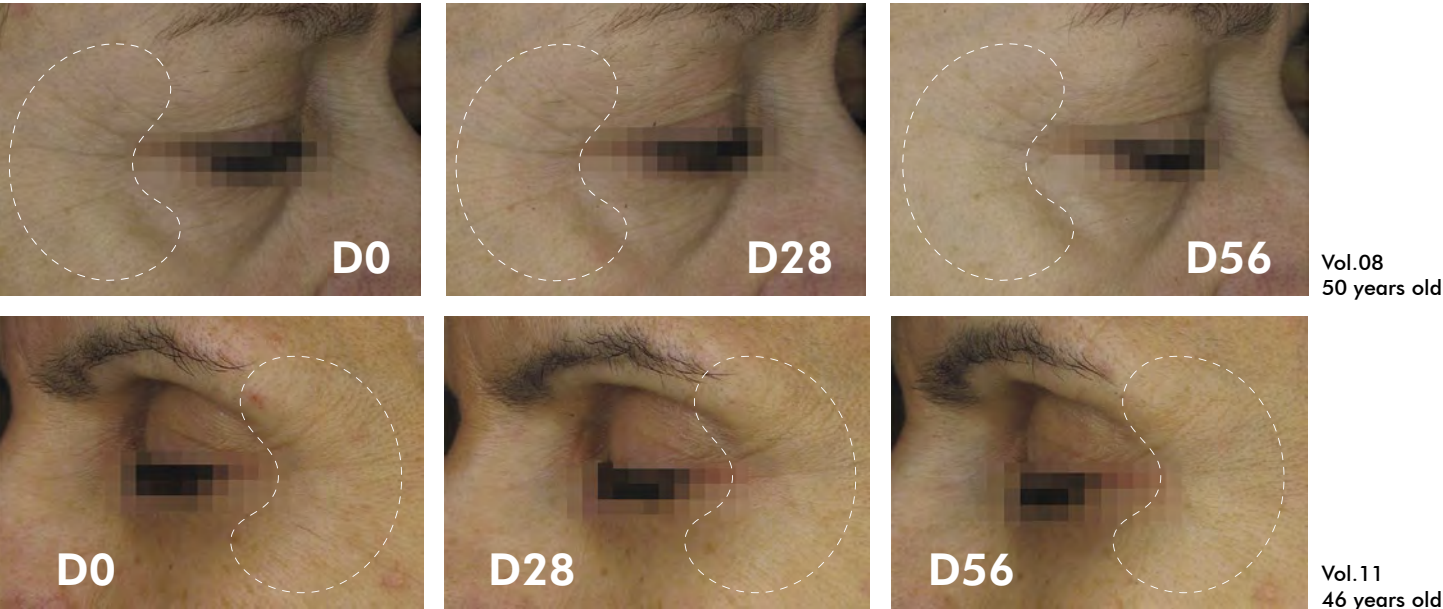
INSTRUMENTAL MEASUREMENTS



AKOSKY™ VANITY
at 2%
DECREASES
WRINKLES VISIBILITY



EYE CONTOUR SKIN ROUGHNESS IMAGES



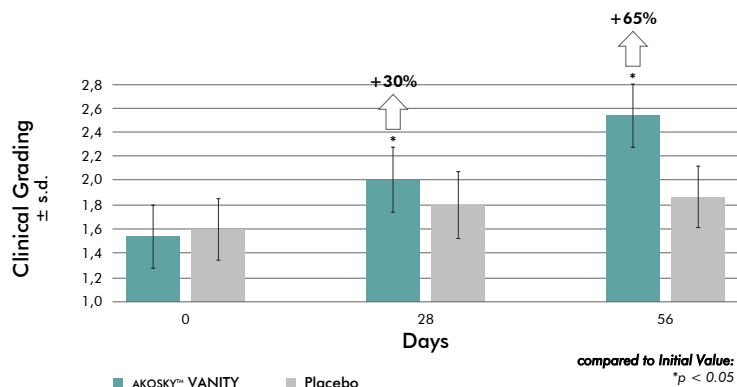
Eye contour lifting effect, reduction of wrinkles and fine lines visibility

EFFICACY EVALUATION

RESULTS

CLINICAL EVALUATIONS

Skin Tonicity Improvement

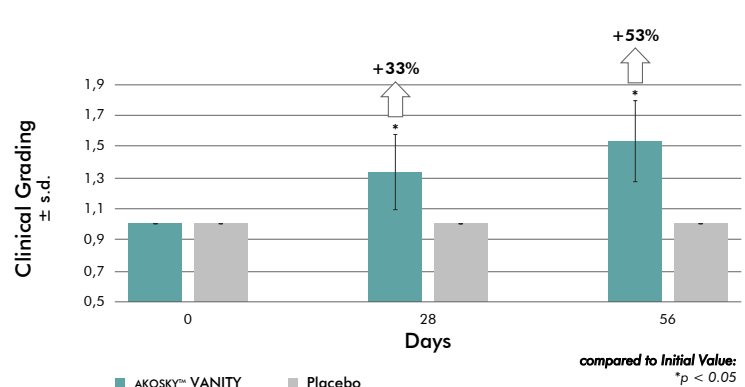


Evaluation Criteria:

1= Skin is not tonic
2= Skin is enough tonic
3= Skin is fairly tonic

4= Skin is tonic
5= Skin is very tonic

Lifting Effect Improvement



Evaluation Criteria:

1= Lifting effect not visible
2= Lifting effect slightly visible
3= Lifting effect moderately visible

4= Lifting effect evident
5= Lifting effect very evident

Self-Evaluation

The product has elasticizing action	100% volunteers
The product has toning action	100% volunteers
The product has lifting effect	100% volunteers
The product ameliorates the face contours definition	93% volunteers
The product reduces skin roughness	100% volunteers
The product improves skin compactness	100% volunteers

CLINICALLY TESTED FORMULATION

ELASTICIZING FACE GEL

PHASE	INGREDIENT	%
A	Aqua (Water)	93.70
	Glycerin	2.00
	AKOSKY™ VANITY	2.00
	Sodium Acrylates/ Sodium Acryloyldimethyl Taurate Copolymer	1.30
	Ethylhexylglycerin, Phenoxyethanol	1.00



CONCLUSIONS

The clinical study demonstrates the ability of **AKOSKY™ VANITY** to restore skin elasticity and skin tonicity, and to reduce wrinkles and fine lines visibility.

PRODUCT INFORMATION

INCI name: Glycerin, Aqua (Water), Nannochloropsis granulata Extract

CAS number: 56-81-5 / 7732-18-5 / --

EINECS number: 200-289-5 / 231-791-2 / --

REGULATORY: EU, USA, China*, Japan*

**INCI Glycerin, Aqua (Water), Plankton Extract*

APPEARANCE: Light green to brown opalescent liquid

SOLUBILITY: Hydrosoluble

USE: Recommended dosage is 2%

FORMULATION TIPS: The product is liquid and easy to use. Recommended pH range is 3 - 8

SAFETY DATA: AKOSKY™ VANITY has been tested for skin tolerance and has demonstrated a very good safety profile

PRESERVATIVE: Potassium Sorbate, Sodium Benzoate

COSMOS: Compliant

HALAL: Compliant

VEGAN: Friendly

COSMETIC PROPERTIES

RESTORES SKIN ELASTICITY,
REDUCES WRINKLES AND FINE LINES,
STIMULATES ECM PROTEINS PRODUCTION,
INCREASES SKIN FIRMNESS

APPLICATIONS

ANTI-AGE PRODUCTS,
ANTI-WRINKLES PRODUCTS,
FIRMING PRODUCTS



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