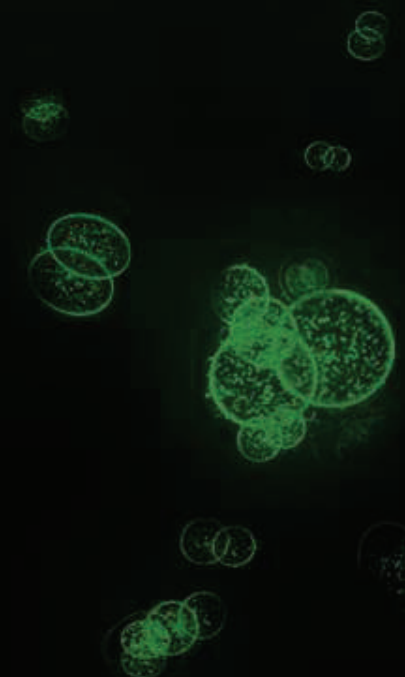


# HR

HELENA RUBINSTEIN



MAJOR BIOTECHNOLOGICAL INNOVATION

SKIN'S SELF-REGENERATION INSTINCT

OCEANIC CRISTA A MIRACLE OF NATURE

THE POWER OF VEGETAL STEM CELLS

3 POWERFUL ACTIONS

EXCEPTIONAL RESULTS

EXCEPTIONAL COMMUNICATION

COMPETITIVE ENVIRONMENT

# PRODIGY RANGE

PIONEER OF HIGH TECH NATURALITY

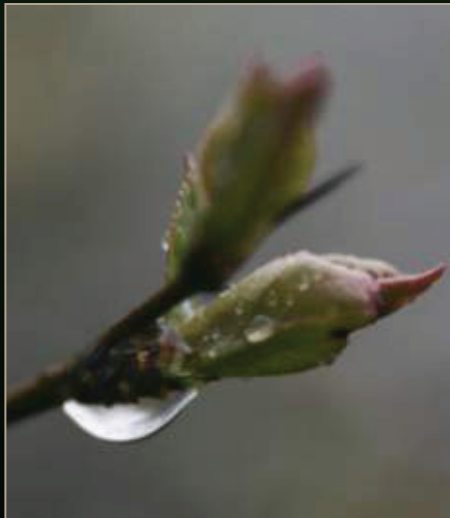
HR  
HELENA RUBINSTEIN



2002

ENCAPSULATED  
BIO SAP

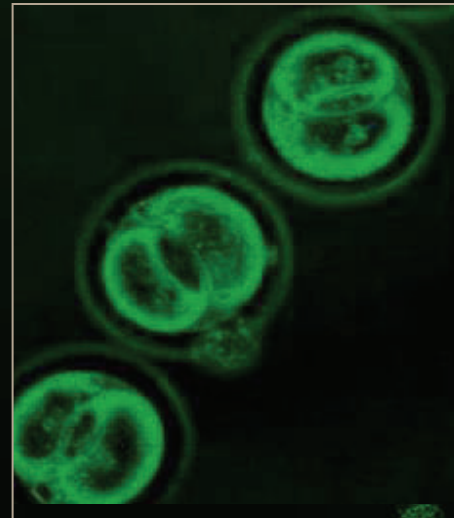
PRODIGY



2006

BIO-MATRICET™  
PLANT TISSUE EXTRACTS IN  
EMBRYONIC STATE

PRODIGY TISSULAR



2010

MAJOR INNOVATION

MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

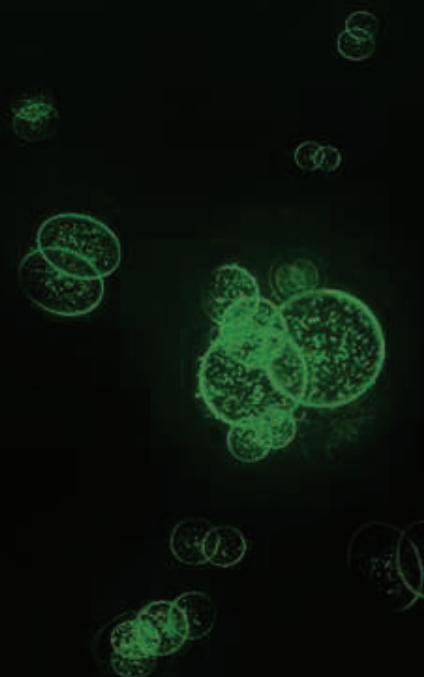
3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# MAJOR BREAKTHROUGH ON VEGETAL STEM CELLS



MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# HELENA RUBINSTEIN CREATES: YOUTH GRAFTER CARE



MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# SKIN'S SELF-REGENERATION POWER

THE SURVIVAL MECHANISM OF THE SKIN

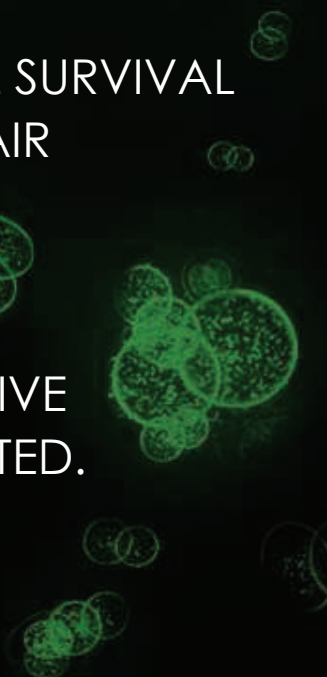
HR  
HELENA RUBINSTEIN



SKIN IS AGGRESSED BY EVERYDAY LIFE,  
ITS NATURAL DEFENSES DIMINISH.

THE SKIN HAS A PHENOMENAL SURVIVAL  
INSTINCT, READY TO SELF-REPAIR  
BY GENERATING NEW CELLS.

WITH AGE, SKIN'S REGENERATIVE  
CAPACITY BECOMES EXHAUSTED.



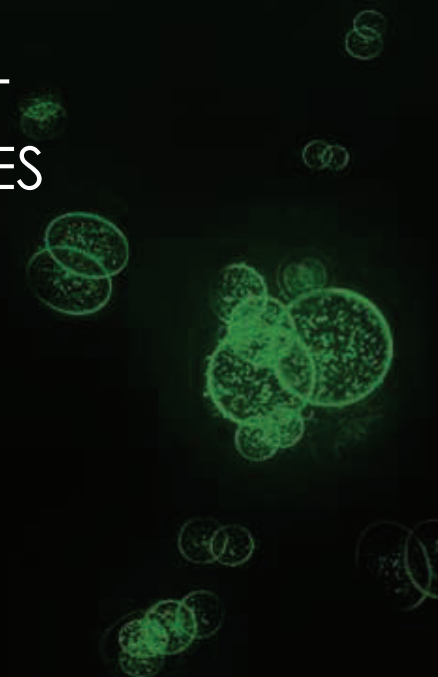
# OCEANIC CRISTA

A TRUE MIRACLE OF NATURE

HR  
HELENA RUBINSTEIN



A POWERFUL PLANT  
WITH EXCEPTIONAL  
SURVIVAL FACULTIES



MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

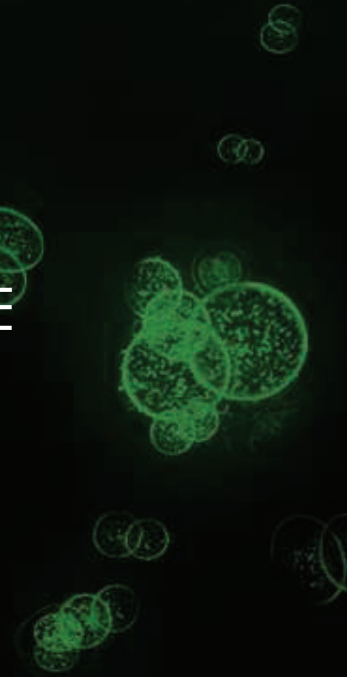
# OCEANIC CRISTA

A TRUE MIRACLE OF NATURE

HR  
HELENA RUBINSTEIN



THE HELENA RUBINSTEIN  
LABORATORIES  
HAVE ISOLATED THE  
QUINTESSENCE OF LIFE



MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# OCEANIC CRISTA

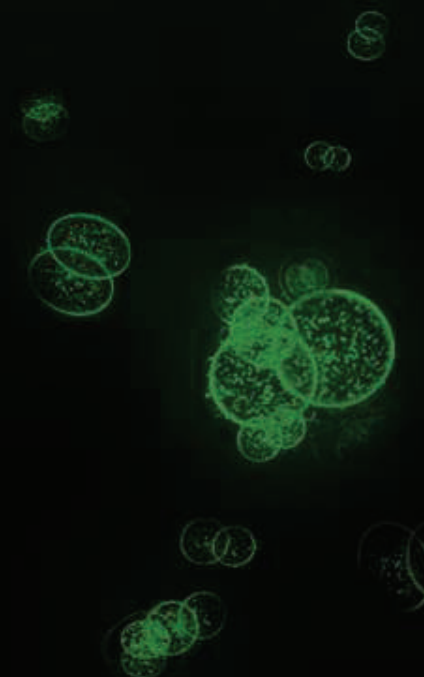
A TRUE MIRACLE OF NATURE

HR  
HELENA RUBINSTEIN



## VEGETAL STEM CELLS

100% ACTIVE POWER



MAJOR BIOTECHNOLOGICAL INNOVATION

SKIN'S SELF-REGENERATION INSTINCT

OCEANIC CRISTA A MIRACLE OF NATURE

THE POWER OF VEGETAL STEM CELLS

3 POWERFUL ACTIONS

EXCEPTIONAL RESULTS

EXCEPTIONAL COMMUNICATION

COMPETITIVE ENVIRONMENT



# NATIVE VEGETAL CELLS

3 POWERFUL ANTI-AGEING ACTIVITIES

HR  
HILANA RUBINSTEIN

1

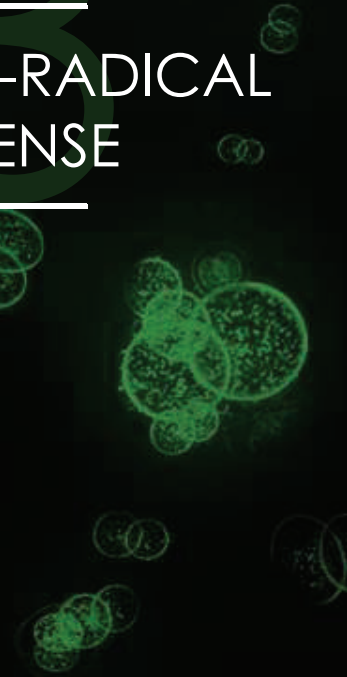
CELL  
REGENERATION

2

TISSULAR  
REPAIR

3

ANTI FREE-RADICAL  
DEFENSE



MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# PRODIGY POWERCELL

INSIDE THIS PRODIGIOUS GREEN BOTTLE...

HR  
HELENA RUBINSTEIN



THE VITAL POWER OF  
VEGETAL STEM CELLS  
IN A YOUTH GRAFTER CARE

MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# PRODIGY POWERCELL

1 FORMULA, 3 POWERFUL ACTIONS

HR  
HELENA RUBINSTEIN



1  
ACCELERATES CELL REGENERATION

2  
IMPROVES TISSULAR REPAIR

3  
REINFORCES ANTI FREE RADICAL DEFENSES

MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

CLINICALLY PROVEN RESULTS  
AFTER 5 DAYS...

HR  
HELENA RUBINSTEIN



SKIN SEEMS RECREATED:  
STRONGER, RADICALLY YOUNGER.

1  
REDUCED  
WRINKLES

2  
REINFORCED  
TONICITY

3  
RECREATED  
RADIANCE

MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

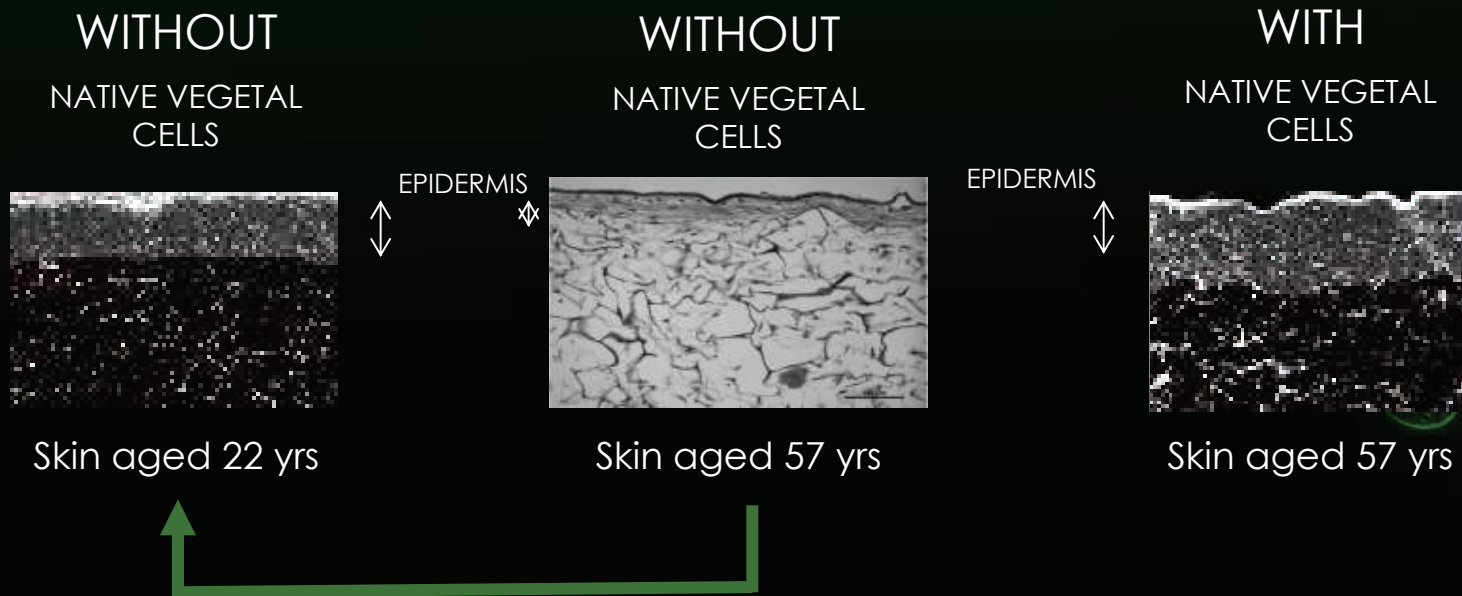
EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# CLINICALLY PROVEN RESULTS

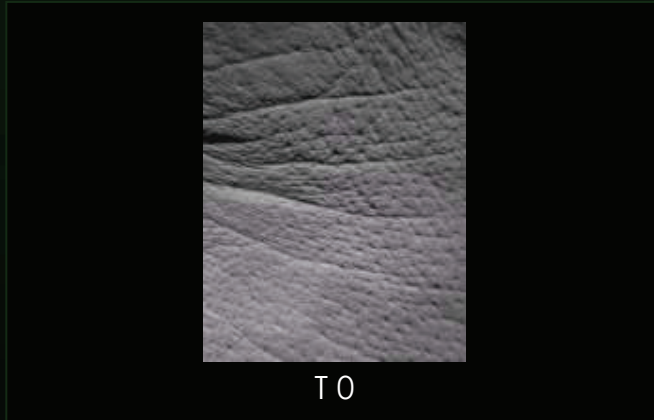
WITH VEGETAL STEM CELLS, THE SKIN RECOVERS  
THE QUALITY OF A YOUNGER, STRONGER SKIN.



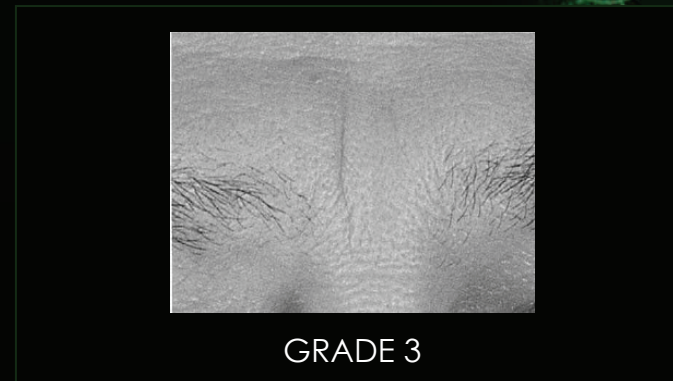
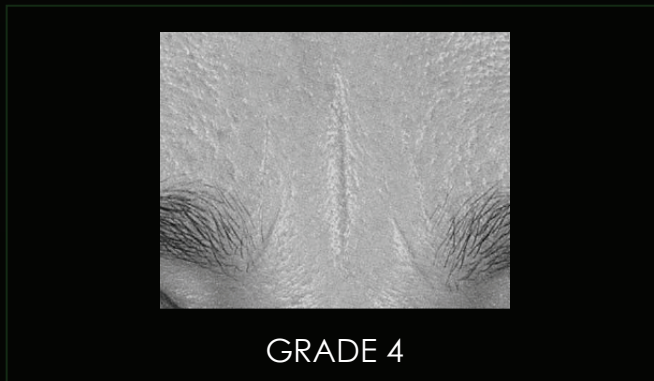
EXCLUSIVE TEST IN THE CUTANEOUS SUBSTITUTES LABORATORY IN LYON FRANCE

# CLINICALLY PROVEN RESULTS

AFTER 1 MONTH,  
39%\* REDUCTION OF THE CROW'S FEET WRINKLES



AFTER 1 MONTH, 72.5% OF WOMEN PRESENT AN IMPROVEMENT OF INTEROCULAR WRINKLES OF AT LEAST ONE GRADE\*\*



\*Cosmetoclinical study with imprint analysis / 40 women

\*\*Scored by a dermatologist / 40 women

# CLINICALLY PROVEN RESULTS

AFTER ONE APPLICATION  
SKIN TONICITY IS IMPROVED BY 15%\*

AFTER 1 MONTH  
SKIN DENSITY IS IMPROVED BY + 9%\*\*

\*Instrumental measurement of biomechanical properties of the skin on 40 women

\*\* Evaluation of the evolution of the cutaneous wrinkling score by a dermatologist according to a photographic scale on 42 women.

# WOMEN AGREE

THE QUALITY OF THE SKIN IS VISIBLY IMPROVED.  
AFTER 5 DAYS, SKIN IS AS IF RECREATED:

SKIN IS MORE SUPPLE	89%
MORE NOURISHED	92%
MORE RADIANT	77%
MORE LUMINOUS	79%
SMOOTHER	87%
SEEMS YOUNGER	62%

Self evaluation, 50 women



# WOMEN AGREE

HR  
HELENA RUBINSTEIN

*"After only a few days,  
my skin is visibly  
smoother, softer and  
more luminous"*

*"A must have !"*

*"The improvement of  
the quality of my skin  
is amazing"*

*"You need only one drop!"*



*"Upon the first  
application, my skin is  
more toned"*

*"My skin is radiant  
of youthfulness"*

*"Addictive!"*

*"My skin feels reinforced,  
denser"*

MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# A RECORD-BREAKING REJUVENATING POWER

HR  
HELENA RUBINSTEIN



30 ML

50 ML

FOR EVERY WOMAN FROM 30 +  
APPLY MORNING AND NIGHT  
BEFORE THE USUAL HELENA  
RUBINSTEIN SKINCARE RITUAL.

MAJOR BIOTECHNOLOGICAL  
INNOVATION

SKIN'S SELF-REGENERATION  
INSTINCT

OCEANIC CRISTA  
A MIRACLE OF NATURE

THE POWER OF  
VEGETAL STEM CELLS

3 POWERFUL  
ACTIONS

EXCEPTIONAL  
RESULTS

EXCEPTIONAL  
COMMUNICATION

COMPETITIVE  
ENVIRONMENT

# COMMUNICATION



**PLEASE INSERT FINAL AD**

THE VITAL POWER  
OF NATIVE  
VEGETAL CELLS

**HR**  
HELENA RUBINSTEIN

THE 1<sup>ST</sup> YOUTH GRAFTER CARE  
SKIN SEEMS RECREATED:  
STRONGER, RADICALLY YOUNGER

## PRODIGY POWERCELL

Scientific avant-garde: biotechnology enables to isolate 100% active, 100% efficient native vegetal cells.

Cosmetic world premiere: Helena Rubinstein concentrates 100% active native vegetal cells of Oceanic Crista which act on the 3 great anti-ageing principles: cellular regeneration – tissular repair – anti free-radical defence, for a record-breaking rejuvenating power.

**CLINICALLY PROVEN RESULTS:**  
REDUCED WRINKLES – REINFORCED TONICITY – RECREATED RADIANCE

WITH NATIVE VEGETAL CELLS, SKIN RECOVERS THE QUALITY OF A YOUNGER SKIN.



22 YEAR OLD SKIN

57 YEAR OLD SKIN

LIVE BRILLIANTLY

# COMMUNICATION

HR  
HUMAN REGENERATION



MAJOR BIOTECHNOLOGICAL INNOVATION

SKIN'S SELF-REGENERATION INSTINCT

OCEANIC CRISTA A MIRACLE OF NATURE

THE POWER OF VEGETAL STEM CELLS

3 POWERFUL ACTIONS

EXCEPTIONAL RESULTS

EXCEPTIONAL COMMUNICATION

COMPETITIVE ENVIRONMENT

# SKINCARE GEOGRAPHY ASIA

## DAILY ANTI-AGE REPAIR

### PRODIGY POWERCELL



REPAIR  
REGENERATION  
DEFENSE

## PRODIGIOUS ANTI-AGE SKINCARE

40 +

### PRODIGY



WRINKLES - FIRMNESS  
RADIANCE  
EVENNESS - HYDRATION

50 +

### LIFE PEARL CELLULAR



DEEP WRINKLES - FIRMNESS  
RADIANCE  
ULTIMATE REJUVENATION

## INSTANT COSMETIC INTERVENTION

### RE-PLASTY MÉSOLIFT COSMETIC



LIFTING  
RADIANCE INJECTION  
IDEAL PLASTICITY

### RE-PLASTY HIGH DEFINITION PEEL



SMOOTHENED WRINKLES  
SKIN PERFECTION  
REDUCED SPOTS

## SPECIALIST ANTI-WRINKLE CARE

### COLLAGENIST WITH PRO-XFILL



ANTI-WRINKLE  
REPLUMPING - FILLING

### COLLAGENIST V-LIFT



ANTI-WRINKLE  
LIFTING - FIRMNESS

### COLLAGENIST PORE REFINER



ANTI-WRINKLE  
ANTI- PORES

## DAILY SKINCARE CLEANSING

### TREE OF LIFE SOUFFLE CREAM



SUPREME CLEANSING  
SOUFFLE CREAM

### TREE OF LIFE HONEY LOTION



CLARIFYING ENRICHED  
HONEY LOTION

### TREE OF LIFE HERBAL LOTION



SILKY HERBAL  
LOTION

## ANTI-AGEING WHITENING UV

### AGEWHITE POWER K



ANTI-SPOTS  
CLARITY  
TRANSLUCENCY

### PREMIUM UV



DAILY UV PROTECTION SPF40  
MAKE-UP BASE SPF50  
12H HYDRATION

# THE HR SERUMS



TARGET

DAILY ANTI-AGE REPAIR

GLOBAL ANTI-AGE

INSTANT COSMETIC INTERVENTION

SPECIALIST ANTI-WRINKLE

Daily aggressions (pollution, stress...), wrinkles, lack of tonicity and radiance

Visible wrinkles, loss of firmness, irregular skin tone

Lack of radiance, signs of tiredness, dull skin tone

Wrinkles, unevenness, discoloration

Visible wrinkles, loss of volume, loss of substance

Loss of firmness, slackening of tissues, wrinkles

PRODIGY POWERCELL  
Youth Grafter

PRODIGY TISSULAR  
Global anti-age serum

PRODIGY RE-PLASTY  
MESOLIFT COSMETIC  
Lifting radiance extreme concentrate

PRODIGY RE-PLASTY  
HIGH DEFINITION PEEL  
Advanced retinol anti-wrinkle night concentrate

COLLAGENIST With pro-xfill  
State of the art anti-wrinkle essence

COLLAGENIST V-LIFT  
Instant Lifting serum reshaped contours



POSITIONING

Daily anti-age repair  
Cell regeneration  
Tissular repair  
Anti-free radicals defense

Global anti-age care

Instant anti-ageing cosmetic intervention  
The mesolift protocol at home

Instant anti-ageing cosmetic intervention  
The peeling protocol at home

Specialist anti-wrinkle care

Specialist firmness & anti-wrinkle care

TECHNOLOGY

Vegetal stem cells of Oceanic Crista

Bio-Matrice (plant tissue extracts Japanese cedar & Vigna seed) Bio-Sap

Meso-solution C<sup>10</sup> Vitamin C + hyaluronic acid + ferulic acid

Peel Solution + pure retinol + Vitamin E derivative

Concentrated PRO-XFILL Collagen Hyaluronic acid

V-peptides Lipo Reducer

RESULT

Reduced wrinkles, reinforced tonicity, recreated radiance: Visible signs of a powerful skin, radically younger.

The skin is as if "re-woven". Reduction of wrinkles, firmer skin, smoothed, firmed, even out, luminous.

Lifting & radiance injection. A visibly rejuvenated skin Active lifting Radiance injection. Transformed skin plasticity.

High definition skin Smoothened wrinkles Reduced spots, Luminous skin texture

Visible anti-wrinkle result, No injection, no compromise. Replumped skin, filled wrinkles.

Lifting effect without surgery. Reshaped, the face recovers a perfect V shape. Lifted features, as if lifted. Firmness and defined contours.

# COMPETITIVE ENVIRONMENT

HR  
HELENA RUBINSTEIN



ESTÉE LAUDER  
ADVANCED NIGHT REPAIR  
Synchronized Recovery Complex

# COMPETITIVE ENVIRONMENT



## The + HR

THE VITAL POWER OF  
VEGETAL STEM CELLS

### 3 POWERFUL ACTIONS

Cell regeneration  
Tissular repair  
Anti-free radical defense

### CLINICALLY PROVEN RESULTS

The skin seems recreated.  
Stronger, radically younger.  
Reduced wrinkles – Reinforced tonicity  
Recreated radiance

Day & Night

## ESTÉE LAUDER

ADVANCED NIGHT REPAIR  
SYNCHRONIZED  
RECOVERY  
COMPLEX



Clock genes /  
DNA

Encourages the  
synchronization of genes  
and repairs the  
damages (pollution,  
smoke...)  
Optimal protection  
& intense hydration

Day & Night

## LANCÔME

GÉNIFIQUE  
YOUTH  
ACTIVATOR



Genes /  
Youth proteins

Relaunches the activity of the  
genes. Stimulates the  
production of youth proteins.  
Skin is visibly younger in just 7  
days.

Day & Night

## BIOThERM

SKIN VIVO  
REVERSIVE  
ANTI-AGEING SERUM



DNA + Genes

Repairs the micro  
alterations of the DNA and  
relaunches the activity of  
the life cell genes  
New skin tensing effect.  
After 4 weeks, the quality of  
the skin is visibly younger.

Day & Night

## DIOR

CAPTURE TOTALE  
ONE ESSENTIAL  
SKIN BOOSTING SUPER SERRUM



Proteins

Eliminates the molecular  
toxins to reactivate the  
cutaneous repair process  
and improves the skin's  
receptivity to the anti-  
aging active ingredients.

Day & Night

TERRITORY

ACTIONS & BENEFITS



# SALES SCENARIO



## PRIORITY #1 RECRUIT NEW CUSTOMERS TO HR

PRODIGY TISSULAR

PRODIGY POWERCELL

DAY / NIGHT CREAM

EYE CONTOUR CARE

THE HR "MUST HAVE"  
SKINCARE RITUAL



+



+



+



Global anti-age  
serum

Daily anti-age  
repair & protection  
youth grafter

Prodigious global  
anti-age care

Prodigious global  
anti-age eye care



# SALES SCENARIO



## PRIORITY #2 EXTEND SKINCARE ROUTINE AMONGST HR CUSTOMERS

COLLAGENIST SERUM

PRODIGY POWERCELL

DAY / NIGHT CREAM

EYE CONTOUR CARE

THE HR SPECIALIST  
SKINCARE RITUAL

FOR EXAMPLE  
IF CLIENT LOYAL TO COLLAGENIST



+



+



+

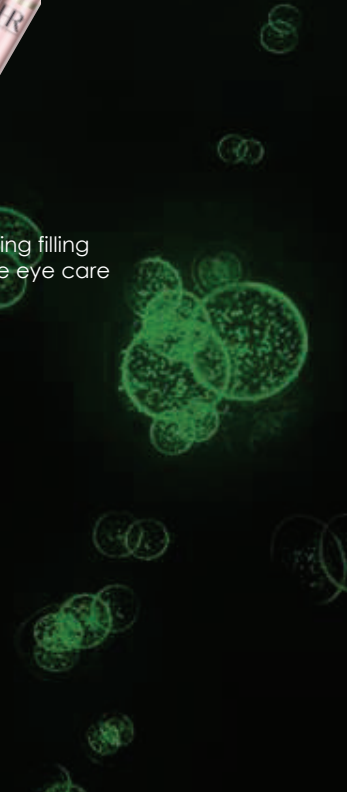


Anti-wrinkle  
essence

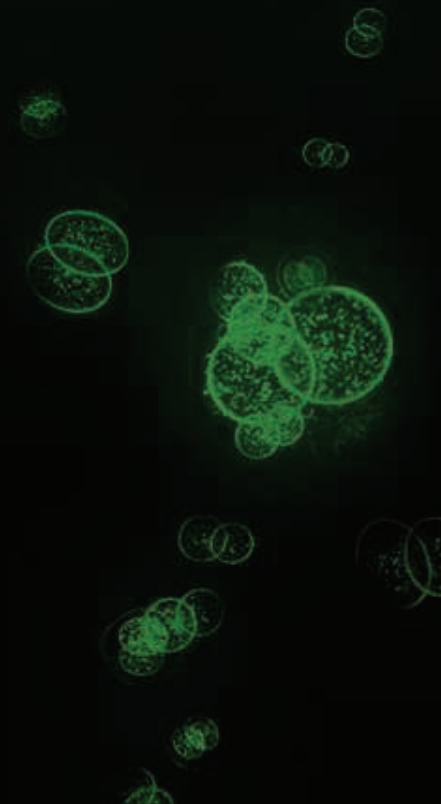
Daily anti-age  
repair & protection  
youth grafter

Replumping filling  
Anti-wrinkle care

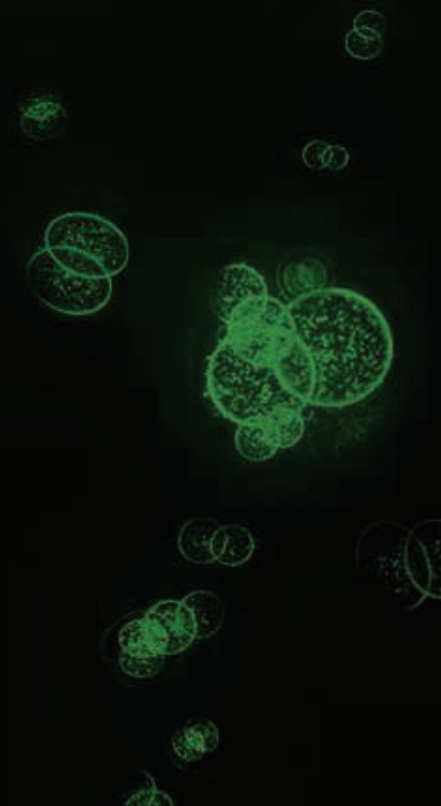
Replumping filling  
Anti-wrinkle eye care



HR  
HELENA RUBINSTEIN



TO KNOW MORE  
For internal use



# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

HR  
HILARY RUBINSTEIN

Réalisés dans le Laboratoire de référence internationale  
du Substitut Cutané de Lyon – France

A FASCINATING SCIENTIFIC ADVENTURE: PROGRESSION OF THE IN VITRO SKIN RECONSTRUCTION EXPERIMENT

IN RECORD TIME AT THE SKIN SUBSTITUTE LABORATORY OF LYON

The first-ever cosmetics study on the in vitro construction of skin was carried out by the Skin Substitute Laboratory of Lyon, affiliated to the CNRS\* and directed by Odile Damour. This Laboratory is internationally renowned, and specialised in the in vitro reconstitution of the epidermis and dermis for skin grafting. Spectacular results have made it possible to demonstrate for the first time the remarkable regeneration capacities of native vegetal cells of Oceanic Crista: they enhance the development of the skin in vitro in both quality and rapidity of reconstruction.

The effects observed are remarkable: the study shows that thanks to of native vegetal cells of Oceanic Crista, the regeneration process of the epidermis is reduced by a week; it is thicker and more differentiated signs of younger skin.

\* French National Centre for Scientific Research

# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

## A FASCINATING SCIENTIFIC ADVENTURE:

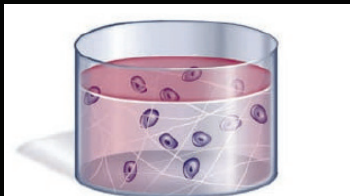
Progression of the in vitro skin reconstruction experiment in record time at the Skin Substitute Laboratory of Lyon

## The challenge of regeneration

Using a dermal equivalent reconstructed according to a technique developed by the Skin Substitute Laboratory, the challenge was to compare the quality of the reconstructed skin in an optimised environment, with and without native vegetal cells of Oceanic Crista.

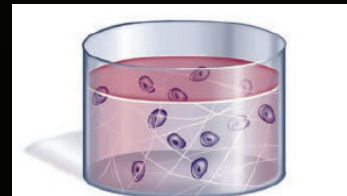
*“The reconstructed dermal equivalent that we use is equal to skin with 3rd degree damage – without its epidermis”, explains Odile Damour. “By inoculating keratinocytes on this ‘dermal equivalent’ and observing the progressive regeneration of the epidermis, it is as if we imitate an epidermal graft on the dermis.”*

WITHOUT ACTIVE  
NATIVE VEGETAL CELLS OF OCEANIC CRISTA

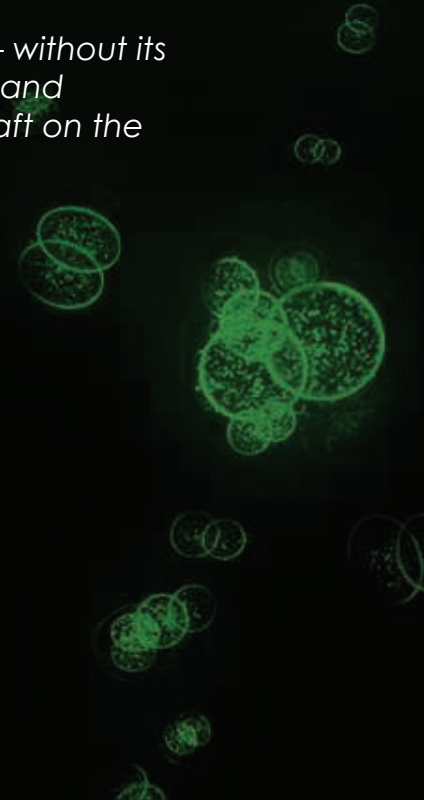


Control (C)  
Control reconstituted dermal equivalent.

WITH ACTIVE  
NATIVE VEGETAL CELLS OF OCEANIC CRISTA



Trial (T)  
Reconstituted dermal equivalent,  
bathing in an environment enriched  
with native vegetal cells of Oceanic  
Crista.



# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

## ACCOUNT OF THE IN VITRO SKIN RECONSTRUCTION STUDY

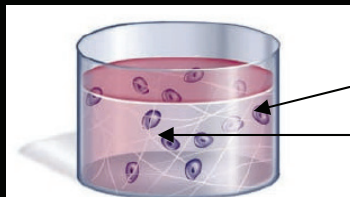
TIME « 0 »

The aim of the study is to reconstitute two dermal equivalents using fibroblasts (dermal cells) from human skin (over 50 years old). The first (C) is the Control. The other (T) tests the efficiency of native vegetal cells from Oceanic Crista. The sampled fibroblasts are inoculated in parallel on two identical dermal substrates composed of collagen-glycosaminoglycan-chitosan, bathing in an enriched environment. Native vegetal cells of Oceanic Crista are only added to the environment culture T. For both samples, the progressive structuring of a collagenic dermis can be observed after just three weeks: this may then be used as a support for the regeneration of epidermal cells inoculated afterwards.

### 1ST STAGE

Collagen fibroblast matrix on the surface

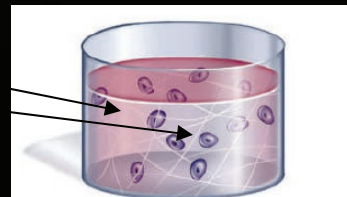
WITHOUT ACTIVE  
NATIVE VEGETAL CELLS OF OCEANIC CRISTA



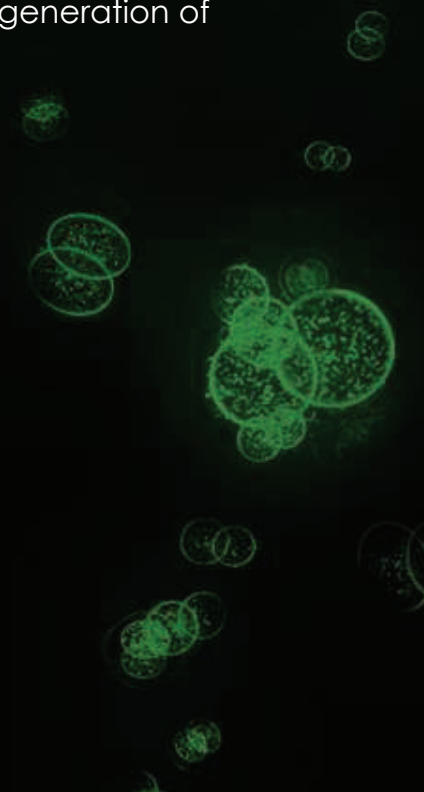
Control (C)  
Control reconstituted dermal equivalent.

Collagen matrix  
Fibroblasts at the surface

WITH ACTIVE  
NATIVE VEGETAL CELLS OF OCEANIC CRISTA



Trial (T)  
Reconstituted dermal equivalent,  
bathing in an environment enriched  
with native vegetal cells of Oceanic  
Crista.



# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

ACCOUNT OF THE IN VITRO SKIN RECONSTRUCTION STUDY

TIME « 21 DAYS »

Results :

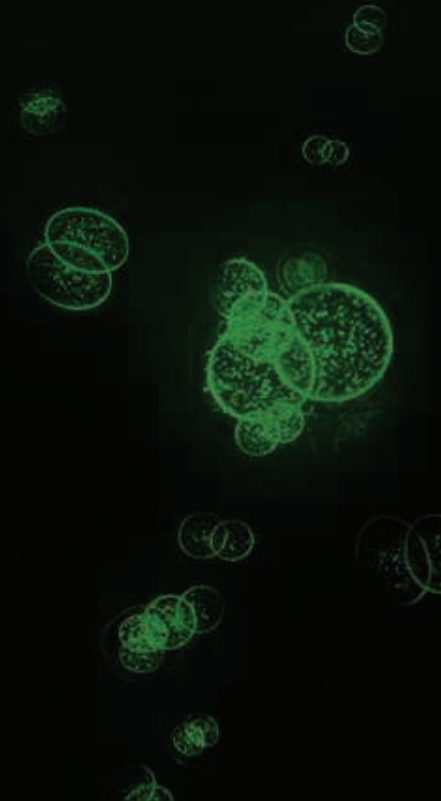
At this stage, it can already be observed that the quality of the dermis reconstituted under the influence of the native vegetal cells of Oceanic Crista is superior.



C  
The dermis has little structure with a few reassembled fibroblasts remaining close to the surface.



T  
The dermis is well structured; fibroblasts are spread homogeneously.





# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

ACCOUNT OF THE IN VITRO SKIN RECONSTRUCTION STUDY

TIME « 21 DAYS »

## 2<sup>nd</sup> stage

The next stage is to introduce keratinocytes (epidermal cells) to each of the dermal equivalents to observe their development. The culture takes place in a submerged environment, with native vegetal cells of Oceanic Crista added to T only.

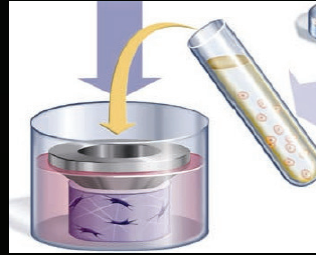


Sampling of keratinocytes on an epidermis.

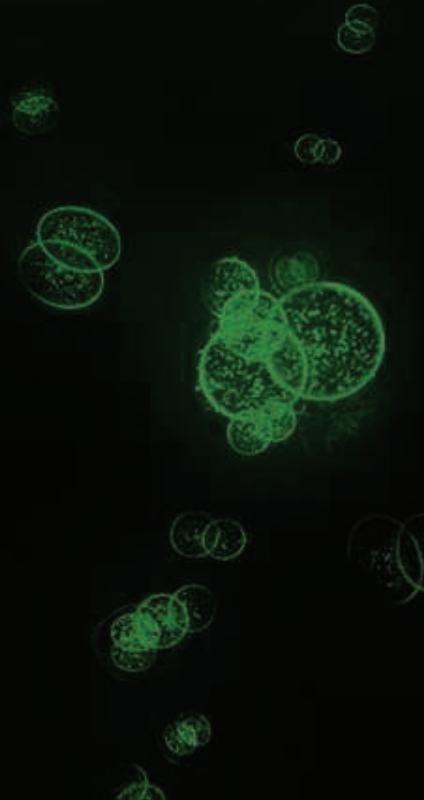
The epidermal keratinocytes are placed in suspension before being introduced onto the dermal equivalent.



C  
Dermal equivalent +  
keratinocytes in a submerged  
environment.



T  
Dermal equivalent + keratinocytes in  
submerged environment with added  
native vegetal cells of Oceanic  
Crista.



# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

ACCOUNT OF THE IN VITRO SKIN RECONSTRUCTION STUDY

TIME « 21 DAYS »

## 3rd stage

The two cultures are exposed to the air.

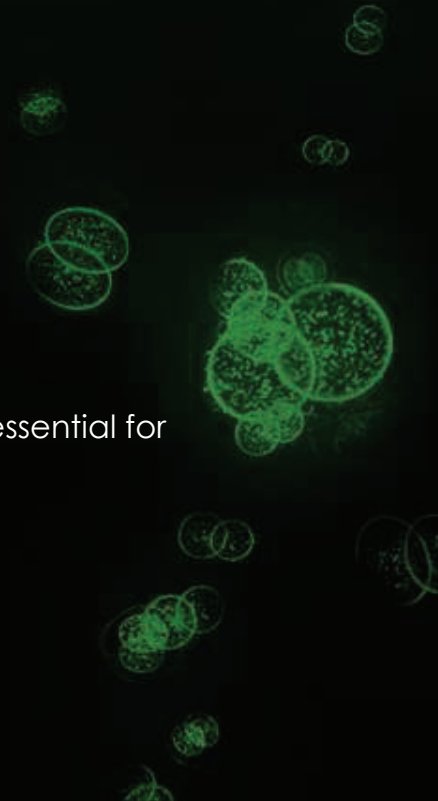


C



T

7 days after the epidermisation, the skins are raised to an air/liquid interface using a tripod, essential for epidermal differentiation and the obtention of the stratum-corneum.



# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

## ACCOUNT OF THE IN VITRO SKIN RECONSTRUCTION STUDY

TIME « 35 DAYS »

The first observations are carried out:

both cultures are subjected to histological and immunohistological analyses. Observation of the epidermis

The preliminary observations are already encouraging: Histological analyses show that, from two weeks, the epidermis is much thicker in the reconstituted skin T, treated with native vegetal cells of Oceanic Crista.

In T, the epidermis already appears pluristratified and thick. It is formed from 3-6 suprabasal cellular layers, while in C there is only one. Better still, it is differentiated with a stratum corneum. The skin is therefore already nearly fully reconstituted! The Oceanic Crista cells allowed the epidermis to gain a week in the regeneration process, in relation to a reconstituted skin untreated with native vegetal cells of



C  
The epidermis remains very thin, formed from one single layer.



T  
The epidermis is already constituted of 6 layers, and has started to produce a corneous layer.

Epiderme X5  
en moyenne



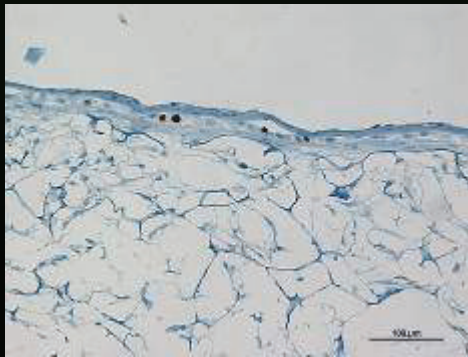
# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

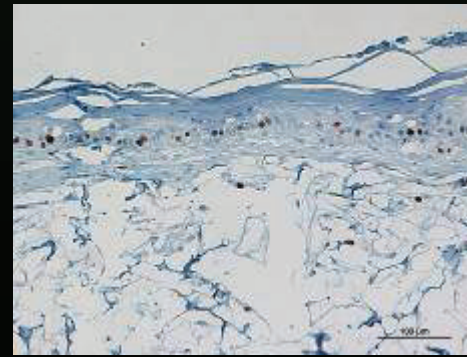
ACCOUNT OF THE IN VITRO SKIN RECONSTRUCTION STUDY

TIME « 35 DAYS »

Proliferation marker Ki 67



C  
Near-absence of  
Ki 67 proliferation markers.



T  
Significant presence of Ki 67 proliferation markers.

These results are confirmed by the analysis of the presence of a proliferation marker (Ki 67): in treated reconstituted skin, the presence of Ki 67 in epidermal cells has increased five-fold in relation to non-treated skin, explaining the quicker regeneration, and is an indicator of a durable effect.

# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

ACCOUNT OF THE IN VITRO SKIN RECONSTRUCTION STUDY

TIME « 42 DAYS »



C  
Total absence of filaggrin



T  
High presence of filaggrin

In the same way, analysis at this stage for the presence of filaggrin – a terminal differential marker of the epidermis (in the corneous layer) – shows a presence in T only. The skin regains properties essential for its barrier function under the action of native vegetal cells of Oceanic Crista.



# EXCLUSIVE IN-VITRO TESTS

ON VEGETAL STEM CELLS OF OCEANIC CRISTA

HR  
HELENA RUBINSTEIN

## RÉCIT DE L'ÉTUDE DE RECONSTRUCTION DE PEAU IN VITRO

### Conclusion

Scientifically proven benefits of accelerated regeneration:

This was the very first cosmetics study of this type. For Odile Damour, it is undeniable that "Native vegetal cells of Oceanic Crista enhance the rapid take of epidermal graft on the dermal equivalent and its protective function, by stimulating the proliferation and differentiation of the cells of the epidermis." The stimulative effects of native vegetal cells of Oceanic Crista are exceptional: under its influence and under the experimental conditions of the study, the epidermis has already regained all its structural qualities and a perfect functionality a week earlier than normal. Besides, at 35 days it can be observed that under the effect of native vegetal cells of Oceanic Crista this epidermis of reconstructed skin (fibroblasts from skin aged over 50) is very similar to young skin; its thickness is nearly identical to that of skin reconstructed with 22-year-old fibroblasts:



Skin reconstructed using 22-year-old fibroblasts without active substance (at 42 days).



Skin reconstructed with fibroblasts over 50 years old, using native vegetal cells (at 35 days).

HR  
HELENA RUBINSTEIN

