

CLAIM SUBSTANTIATION

in vitro

TRANSLUCENCE & MOISTURISATION

α -crystallin +161 %, p<0.01/control ⁽¹⁾ x2.19, p<0.01/control ⁽²⁾
Control			CERAMIDES
Ceramides +334 %, p<0.01/control ⁽³⁾
Control			FILAGGRIN
Filaggrin +554 %, p<0.01/control ⁽³⁾ . +416 %, p<0.01/control ⁽²⁾
Control			HYALURONIC ACID
Hyaluronic acid +91 %, p<0.01/control ⁽⁴⁾

EPIGENETICS & INFLAMMATORY POTENTIAL

lnc-RNA ANCR			-34 %/control, p<0.01 ⁽⁵⁾
PGE2	-74 %*/control+stress	IL-1 α	-46 %*/control+stress
TNF- α	-71 %*/control+stress	IL-1 β	-54 %*/control+stress
		IL-6	-84 %*/control+stress

CELL DIFFERENTIATION & COHESION MARKERS

TRPC6 (T6h)			x6.05/control ⁽⁶⁾
Involucrin +60%; p<0.05/control ⁽³⁾
Control			LORICRIN
Loricrin +261 %; p<0.01/control ⁽³⁾
Late cornified envelope proteins ⁽⁶⁾			
LCE2B	x2.13, LCE3C	x3.25, LCE3D	x2.06
LCE3E	x2.33, LCE2D	x1.84	
Small proline rich region proteins			
SPRR2C ⁽⁶⁾	x1.58, SPRR2B ⁽⁶⁾		x2.13
SPRR1A ⁽²⁾	x1.55, p<0.01/control		
NICE-1		x3.42; p<0.01/control ⁽²⁾	
Transglutaminase			
Activity		+107 %; p<0.01/control ⁽⁷⁾	
TG-5 gene expression		+798 %; p<0.01/control ⁽⁵⁾	
Keratin 10x1.46; p<0.01/control ⁽²⁾	
Desmoglein +24%; p<0.01/control ⁽⁸⁾	
Control			
Kallikrein 5			+258%; p<0.01/placebo ⁽⁸⁾

TECHNOLOGIES

- (1) Skin equivalents + immunohistology, CRYSTALIDE™ eq. 3%
- (2) Normal human keratinocytes + LC-MS/MS, CRYSTALIDE™ eq. 2%
- (3) Normal human keratinocytes + ImmunocytoLOGY, CRYSTALIDE™ eq. 1%
- (4) Normal human keratinocytes + ELISA, CRYSTALIDE™ eq. 3%
- (5) Normal human keratinocytes + qRT-PCR, CRYSTALIDE™ eq. 3%
- (6) Normal human keratinocytes + DNA-Array, CRYSTALIDE™ eq. 2%, 24h
- (7) Normal human keratinocytes + enzymatic activity, CRYSTALIDE™ eq. 3%
- (8) Skin explants + immunohistology, CRYSTALIDE™ eq. 3%

SIGNIFICANCE:
*p<0.01/T0
**p<0.05/placebo

CRYSTALIDE™ exerts a holistic activity in the epidermis, from the deep layers to the skin surface:

- ◀ Preserves skin proteostasis through α -crystallin
- ◀ Regulates the rhythm of the keratinocyte maturation
- ◀ Balances the epigenetic phenomena
- ◀ Enables the harmonious epidermis desquamation

As a bio-highlighter, CRYSTALIDE™ makes the skin look clear, uniform and glowy just like a piece of crystal.

in vivo

CLINICAL STUDIES

Twice-daily application of a cream containing CRYSTALIDE™ 3% against placebo* for 6 weeks. 22-44 years old. * Except for skin complexion

IMPROVEMENT IN THE SKIN COMPLEXION

Evaluation of the radiance by a visual sensory analysis (CLCT method) on 26 volunteers with dull complexion and phototype I to III. Scoring by 3 expert judges.

Pink red	0 %	Improvement in skin complexion CLCT index	+33.5 %*/T0 81 % respondents
Olive	-25 %*, up to -50 %		
Beige	-4 %*, up to -10 %		
Soft pink	+16 %*, up to +33 %		
Luminosity	+4 %		
Clarity	+4.4 %*, up to +14 %		
Transparency	+7.7 %		

SKIN DEW

Instrumental evaluation of the skin moisturisation by Epsilon E100 on 25 volunteers (image of moisturisation).

Moisturisation (Σ)+25.8 %*/T0, up to 99 %*
			80 % respondents

MAINTENANCE OF THE CORNEOCYTE SIZE

Instrumental evaluation of the corneocyte size by automatic analysis with optical microscope on 29 volunteers.

Placebo		-2.4 %/T0
CRYSTALIDE™		-0.5 %**/T0

UNIFORMITY & SMOOTHNESS OF THE SKIN SURFACE

Evaluation of the soft-polish effect by colour camera on 20 volunteers on the forearm. 5 expert judges. Cream with 3% CRYSTALIDE™ for 6 weeks and monitoring of DHA colouration fading.



Instrumental evaluation of the skin microrelief by LED colour camera on the forearm of 28 volunteers.

MICRORELIEF DEPTH (μm)		-12.8 %*/T0, up to -29 %*
		79 % respondents
MICRORELIEF COMPLEXITY (%)		-20.9 %*/T0, up to -42 %*
		79 % respondents

