



# Vinciencia™ Biofunctionals

---

2017 synopsis for  
skin care and hair  
care applications



Ashland™  
always solving

<b>Table of Contents</b>	<b>Page Numbers</b>
Vincienc Skin Care Biofunctionals	3 – 15
Vincienc BioHAIRapy Hair Care Biofunctionals	16 – 17
Product/Activity List	18 – 19

## **Vincienc™ biofunctionals**

The world leader in skin care and hair care technology expands its portfolio based on advanced science.

### **Pathways to Beautiful Skin**

Finding new routes to beautiful skin, Vincienc is advancing the efficacy of anti-aging skin care in 2016. Most recently, the R&D team identified specific enzymes that may assist the skin in recycling collagen, a finding that may change the way topical serums and lotions are formulated to perform below the surface to enhance skin function. Examining epigenetic regulators inside cells that may be modulated with certain biofunctional ingredients, Vincienc also demonstrated the potential to achieve beneficial outcomes for skin appearance, such as reducing the appearance of wrinkles and skin brightening. Great things are happening in skin care research. Learn more about Vincienc R&D dedicated to finding safe, efficient and novel routes to beautiful skin.

# Vincience™ Skin Care Biofunctionals

## Achromaxyl™ ISR

**A skin brightening botanical extract with clinically proven efficacy on the appearance of skin color.**

INCI: Water (and) Glycerin (and) Hydrolyzed Brassica Napus Seedcake Extract

Preservative system: sodium benzoate, potassium sorbate

Recommended use level: 1% to 3%  
(clinically tested at 3%)

## Acnacidol™ BG

**Clinically tested Royal Jelly mimetic that helps balance sebum.**

INCI: Butylene Glycol (and) 10-Hydroxydecanoic Acid (and) Sebacic Acid (and) 1,10-Decanediol

Preservative system: preservative-free

Recommended use level: 1% to 5%  
(clinically tested at 3%)

- Decreases sebum in 1 hour

## Actopontine™

**Bioinspired by nature to optimize skin matrix architecture.**

INCI: Water (and) Butylene Glycol (and) sh-Hexapeptide-2

Preservative system: sodium benzoate

Recommended use level: 1% (clinically tested at 1%)

- Associated with an in vitro increase in proteins critical for building and remodeling the Extracellular Matrix: dermatopontin, collagen I, collagen III, laminin-V, fibronectin and alpha-3 integrin
- Shown in vitro to enhance proteins involved in cell shape and integrity: paxillin for fibroblasts' shape, moesin known as a marker of cell longevity and integrity
- For potential enhancement of skin elasticity and density: tropo-elastin and elastin-associated proteins involved in elastin fiber assembly, skin density and fiber orientation known to contribute to a youthful appearance

## Actopontine YST™

**Bioinspired by nature to optimize skin matrix architecture.**

(see Actopontine)

INCI: Water (and) Glycerin (and) Hydrolyzed Yeast Protein

Preservative system: sodium benzoate

Recommended use level: 1%

## Aqua-Osmoline™

**Targets water control for improved hydration and skin glow.**

INCI: Water (and) Glycerin (and) Ceratonia Siliqua (Carob) Seed Extract

Preservative system: phenoxyethanol, sodium benzoate

Recommended use level: 1% (clinically tested at 1%)

- Associated with results *in vitro/ex vivo* hyaluronic acid expression (*ex vivo*) linked with water filling and renewal effects
- Targets water channeling control and water sealing
- Improved hydration contributes to preserve cell shape and cohesion during stress
- Maintain skin's natural expression of proteins linked with epidermal differentiation and stratum corneum plasticity
- Increases skin hydration and perception of skin glow (*in vivo*)

## Aquarize IS™

**Anti-aging skin-moisturizing rice extract with clinically proven efficacy on short-term and long-term hydration of the skin.**

INCI: Water (and) Butylene Glycol (and) Hydrolyzed Rice Extract

Preservative system: preservative-free

Recommended use level: 1% to 3% (clinically tested at 1%)

- Supports synthesis of collagen I and collagen III (*in vitro, ex vivo*)
- Supports expression of filaggrin (*ex vivo*)
- Significantly increases skin hydration
- Reinforces skin-barrier function

## ATPeptide™ IS

**An energy-boosting peptide specially designed to help revitalize aging skin as well as help smooth the appearance of cellulite prone skin.**

INCI: Water (and) Butylene Glycol (and) Tripeptide-3

Preservative system: preservative-free

Recommended use level: 0.5% to 1.5%

- Supports maintenance of ATP levels (*in vitro*)
- Increases levels of intracellular calcium (*in vitro*)
- Helps lipolysis (*in vitro*)

## NEW Blumilight™

**Premium cocoa peptides for blue light pollution.**

INCI: Water/Aqua (and) Butylene Glycol (and) Theobroma Cacao (Cocoa) Seed Extract

Preservative system: preservative-free

Recommended use level: 1% (clinically tested at 1%)

- Decrease in Reactive Oxygen Species during blue light stress (*in vitro*)
- Maintenance of opsin photoreceptors during blue light stress (*in vitro*)
- An increase in collagen1, fibrillin-1 and syndecan-4 (*in vitro, ex vivo*)
- Visible improvement of elastin fibers network (*ex vivo*)
- An improvement of skin elasticity (*in vivo*)
- Visible improvement of skin wrinkles (*in vivo*)

## Caspaline 14™

**Synthetic peptide to help enhance skin's natural UV defenses and help fight the visible signs of aging.**

INCI: Water (and) Propanediol (and) Hexapeptide-42

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1%

(clinically tested at 0.5%)

- Helps maintain expression of caspase-14 (*in vitro*, *ex vivo*)
- Helps maintain expression of filaggrin (precursor of NMF) (*ex vivo*)
- Helps limit skin damage from UV (*ex vivo*, *in vivo*)

## Chondricare™ IS

**Anti-aging peptide designed to adaptively energize skin; inspired by the science of mitochondrial DNA.**

INCI: Water (and) Butylene Glycol (and)

Pentapeptide-28

Preservative system: preservative-free

Recommended use level: 1%

- Increases aconitase enzymatic activity (*in vitro*)
- Stimulates cell vitality (*in vitro*)

## Chronogen™

**Innovative anti-aging tetrapeptide, designed using advanced molecular biology and inspired by epigenetic science.**

INCI: Water (and) Butylene Glycol (and)

Tetrapeptide-26

Preservative system: phenoxyethanol, sodium benzoate

Recommended use level: 1% (clinically tested at 1%)

- Associated with a maintenance of expression of CLOCK, BMAL1 and PER1 (*in vitro*, *ex vivo*)
- Associated with a decrease of induced sun burn cells
- In vitro results show repair of UV damage

## Chronogen™ YST

(see Chronogen)

INCI (proposed): Water (and) Glycerin (and)

Hydrolyzed Yeast Protein

Preservative system: sodium benzoate

Recommended use level: 1% (clinically tested at 1%)

## Collaxyl™ IS

**Anti-aging peptide clinically proven to visibly reduce the length and depth of wrinkles.**

INCI: Water (and) Butylene Glycol (and)

Hexapeptide-9

Preservative system: preservative-free

Recommended use level: 0.5% to 1.5% (clinically tested at 1.5%)

- Rapidly decreases the appearance of skin wrinkles (*in vivo*)
- Enhances epidermal renewal (*ex vivo*)
- Associated with protein synthesis (collagen types I and III) (*in vitro*)
- Associated with maintenance of dermal-epidermal junction key proteins (laminin-5, integrins, collagen IV) (*in vitro*)
- Associated with a stimulus in epidermal differentiation markers (keratin, filaggrin) (*in vitro*)
-

## Cotton Bloom™ 5S

### Skin cocooning and cushioning.

INCI: Water (and) Glycerin (and) Hydrolyzed Cottonseed Extract (and) Trehalose (and) Glucose (and) Fructose (and) Sucrose (and) Inositol

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1.5%

(clinically tested at 1.5%)

- May help increase the resistance of skin cells during osmotic shock (*in vitro*)
- May help limit stress-induced DNA damage (*in vitro*)
- Contributes to improvement of skin hydration (*in vivo*)

## D'Orientine™ S

### Date palm kernel extract with clinically proven properties that can reduce the appearance of wrinkles and help protect skin from environmental sources of aging and wrinkling.

INCI: Caprylic/Capric Triglyceride (and) Phoenix Dactylifera (Date) Seed Extract

Preservative system: preservative-free

Recommended use level: 1% to 2.5%

(clinically tested at 2.5%)

- Decreases the appearance of skin wrinkles rapidly and significantly slows the visible effects of aging better than DHEA on *ex vivo* skin
- Associated with increase of type I collagen synthesis on *ex vivo* skin
- Improves the natural defense mechanisms against oxidative stress (SOD and catalase) (*in vitro*)
- Reduces protein carbonylation (*in vitro*)
- Decreases lipid peroxidation (*in vitro*)

## Dermostatyl IS™

### Anti-aging peptide, inspired by epigenetic science related to collagen renewal and melanin regulation, to help reduce the appearance of wrinkles and brighten skin tone.

INCI: Water (and) Butylene Glycol (and) Hexapeptide-2

Preservative system: preservative-free

Recommended use level: 0.5% to 1%

(clinically tested at 1%)

- Epigenetic scientific approach targeting microRNA
- Helps limit age related increase of miR-29 (*in vitro*). miR-29 is linked to collagen synthesis
- Helps boost the synthesis of procollagen and *ex vivo* expression of collagen I and collagen III (*in vitro*)
- Helps maintain prolyase activity, enzyme involved in collagen recycling (*in vitro*)
- *In vivo* study suggests reduction of the appearance of wrinkles
- Helps boost the expression of miR-218. miR-218 is linked to several pathways regulating melanin synthesis
- Helps decrease *in vitro* and *ex vivo* the expression of melanin
- *In vivo* study demonstrates brightening of skin tone appearance

## Dynachondrine™ ISR

**Bioenergizing botanical extract inspired by scientific knowledge of mitochondrial sirtuin (SIRT3); designed to increase skin energy and reduce ROS.**

INCI: Water (and) Glycerin (and) Hydrolyzed Soy Protein (and) Sodium Benzoate (and) Potassium Sorbate

Preservative system: Rokonsal™ BS preservative

Recommended use level: 1%

- Maintains SIRT3 expression (*in vitro*)
- *In vitro* studies show an increase in mitochondrial membrane potential
- *In vitro* studies show an increase in durable ATP synthesis
- *In vitro* studies show a reduction in mitochondrial ROS production

## Ederline™ S

**An apple seed extract with clinically proven wrinkle reduction properties that help to rejuvenate aged skin.**

INCI: Hexyldecanol (and) Butylene Glycol (and) Pyrus Malus (Apple) Seed Extract

Preservative system: preservative-free

Recommended use level: 1% to 3%  
(clinically tested at 2.5%)

- Rapidly and significantly decreases appearance of skin wrinkles
- Associated with an increase collagen synthesis (*in vivo*)

## Elixiance™

**Natural and sustainable Peruvian *Schinus molle* extract with pollution-shielding, skin-purifying and age-perfecting benefits.**

INCI: Propanediol (and) Water/Aqua (and) *Schinus molle* extract

INCI: Propanediol (and) Water/Aqua (and) Bioflavonoids

Preservative system: preservative-free

Recommended use level: 1% to 1.5%

- Antioxidant: *Schinus molle* leaf extract is known to have antioxidant properties
- A significant cell protection against air pollution PM2.5 & PM10 (*in vitro*)
- A strengthening of the skin barrier (*in vitro*, *ex vivo*)
- A reduced permeability induced by environmental stress (*ex vivo*)
- Oil control and pore refining (*in vivo*)
- A fresher, younger-looking skin with less visible wrinkles (*in vivo*)



## GP4G SP™

**Aquatic energizing and protecting plankton nucleotides to help the skin absorb environmental aging shocks.**

INCI: Water (and) Artemia Extract

Preservative system: phenoxyethanol, potassium sorbate

Recommended use level: 1 to 2%  
(clinically tested at 2%)

- Ultraviolet shocks, oxidative stress and DNA damage. *In vitro* results with GP4G SP
- Infrared shocks, mitochondria stress, ROS production. *In vitro* results with GP4G SP
- Heat shocks, protein damage. Role of Heat Shock Proteins (HSP). *In vitro* results of GP4G SP
- Cold shocks, DNA transcription and protein translation slow down. Role of Cold Inducible RNA Binding Proteins (CIRBP). *In vitro* effect of GP4G SP
- *In vivo* results suggest GP4G SP may help limit the appearance of skin aging

## NEW Harmoniance™

Extracted with **Zeta Fraction™ Technology**

**Sacred Lotus extract for total anti-age control, face and body.**

INCI: Nelumbo Nucifera (Lotus) Extract

Preservative system: Potassium Sorbate, Sodium Benzoate, Sodium Metabisulfite

Recommended use level: 0.5 to 1%  
(clinically tested at 0.5%)

Skin aging and dermis

- Increased collagen I expression (+38% *in vitro*)
- Inhibition of elastase activity (-25% *in vitro*)
- Improved skin softness (+25% *in vivo*)
- Reduction in appearance of wrinkles (-20% *in vivo*)

Anti-oxidant properties

- ORAC (Oxygen Radical Absorbance Capacity): 1g. Lotus has antioxidant potency equal to 30.6mg of (R)-Trolox methyl ether.
- DPPH (2,2-diphenyl-1-picrylhydrazyl) quenching: 1g. Lotus quenches 25.8mg DPPH.

Skin hydration and barrier function

- Increased filaggrin expression (+65% *ex vivo*)
- Increased hyaluronic acid expression (+48% *ex vivo*)
- Increased aquaporin 3 (AQP3) expression (+22% *ex vivo*)
- Increased barrier function (+85% *ex vivo*)
- Increased skin hydration (+14% *in vivo*)
- Decreased TEWL (-8% *in vivo*)

Skin tone

- Melanin control (-80% *ex vivo* human skin)
- Anti-inflammatory activity on PGE2 (-50%)

Body contour and cellulite skin

- Increased glycerol release (+73% *in vitro*)
- Drainage and body contouring (-12 mm on thigh *in vivo*)



## Heliostatine ISR™

**Botanical extract with clinically proven tan enhancement effect for a healthy glow and radiance.**

INCI: Water (and) Glycerin (and) Pisum Sativum (Pea) Extract

Preservative system: sodium benzoate

Recommended use level: 1% to 1.5%  
(clinically tested at 1.5%)

- Helps maintain sun tan (17 volunteers) (*in vivo*)

## Laminixyl IS™

Laminin-5 peptide designed to help preserve skin integrity and the dermal-epidermal junction.

INCI: Water (and) Butylene Glycol (and) Heptapeptide-8

Preservative system: preservative-free

Recommended use level: 0.5%  
(clinically tested at 0.5%)

- *In vitro* tests show enhanced synthesis of laminin-5 and  $\beta 1$  integrin (key components of the dermo-epidermal junction)
- *Ex vivo* lab results show enhanced synthesis of integrins and keratins (involved in cell-to-cell adhesion and improvement of the skin barrier function)
- Enhances *ex vivo* the synthesis of extracellular matrix proteins (involved in consolidating the support network of the skin)

## Lipigenine™

**Advancing physical and biochemical skin barrier functions.**

INCI: Water (and) Glycerin (and) Linum Usitatissimum (Linseed) Seed Extract

Preservative system: phenoxyethanol, sodium benzoate

Recommended use level: 1% to 1.5%  
(clinically tested at 1.5%)

- May help skin enhance natural lipid synthesis within the stratum corneum
- May help skin with natural lipidic homeostasis and recovery following stress
- Enhances *in vitro* and *ex vivo* antimicrobial peptides (cathelicidin and beta defensins)
- May help normalize microflora balance on the surface of skin
- Supports a skin soothing effect and may limit the appearance of skin sensitivity

## Marine Hydrolyzed Collagen LMW™

**Marine collagen oligopeptides.**

INCI: Water (and) Hydrolyzed Collagen

Preservative system: phenoxyethanol, sodium benzoate

Recommended use level: 1%

- Associated with increase collagen I in human skin (*ex vivo*)
- Associated with increase collagen III in human skin (*ex vivo*)
- Associated with boost hyaluronic acid in human skin (*ex vivo*)

## Neomatrix™

**Inspired by wound healing science and stratifin epidermal biomessenger that is linked with dermal remodeling and wrinkle repair.**

INCI: Water/Aqua (and) Glycerin (and)

sh-Pentapeptide-6 Trifluoroacetate

Preservative system: sodium benzoate,

potassium sorbate

Recommended use level: 1% (clinically tested at 1%)

- Biomessaging Technology: enhances epidermal stratifin expression to help skin optimize epidermal-dermal cross-talk (*in vitro*, *ex vivo*)
- Matrix Remodeling
  - ECM Turnover balance through skin's physiological and normal MMPs expression for aged collagen degradation in parallel with neo-collagen synthesis (*in vitro*)
  - New Matrix production: pro-collagen, collagen I, collagen III, hyaluronic acid (*in vitro*, *ex vivo*)
  - Dermal reorganization: helps skin improve fibroblast strength and optimize matrix contraction (*in vitro*)
- Wrinkle Repair (clinical study)

## Oleanoline™ IS

**Olive leaf extract that detoxifies and clarifies skin and is clinically proven to improve the appearance of irritated skin.**

INCI: Europaea (Olive) Fruit Oil (and) Olea Europaea (Olive) Leaf Extract

Preservative system: preservative-free

Recommended use level: 1% to 5%

(clinically tested at 2% and 5%)

- Helps reduce the appearance of redness
- Helps preserve skin barrier function in presence of stress

## Orsirtine™ ISR

**A breakthrough anti-aging technology, inspired by the science of sirtuins and skin longevity. Positioned for anti-aging facial products, it helps promote long-term skin benefits and natural protection from environmental aggression.**

INCI: Water (and) Glycerin (and)

Oryza Sativa (Rice) Extract

Preservative system: potassium sorbate,

sodium benzoate

Recommended use level: 1% (clinically tested at 3%)

- *In vitro* lab tests demonstrate a decrease in cell senescence
- *In vitro* lab tests demonstrate extended longevity of aged keratinocytes and fibroblasts (*in vitro*)
- *In vitro* studies shows SIRT1 content increased in the skin more than polyphenols
- Skin protection and repair were demonstrated *in vitro* after UV and oxidative damage
- *Ex vivo* studies demonstrate an improvement in the appearance of skin exposed or not exposed to UV

## Oxygenated Glycerol Triesters D™

**Clinically shown to help improve scalp condition; helps provide comfort and soothing properties.**

INCI: Oxidized Corn Oil

Preservative system: preservative-free

Recommended use level: 2% to pure  
(clinically tested at 2% and 3%)

- Super-oxygenated corn oil
- Soothing properties

## NEW Peptide Q10™

**Indoor pollution: anti-aging peptide boosting skin's ubiquitous CoQ10 for anti-oxidant defenses**

INCI: Water (and) Propanediol (and) Pentapeptide-34 Trifluoroacetate

Preservative system: sodium benzoate

Recommended use level: 0.5 to 1%  
(clinically tested at 0.5% and 1%)

- Associated with endogenous synthesis of CoQ10 and non-mitochondrial CoQ10 through UBIAD1 pathway (*in vitro*)
- With indoor pollution (model using cumene "Volatile Organic Compound"): limit lipid peroxidation, ROS production and maintain cell membrane integrity (*in vitro*)
- Decreases protein damage by RNS, reactive nitrogen species (*in vitro*)
- Decreases sun damage (UVB, UVA, *in vitro*)
- Limit appearance of skin aging (wrinkles and skin smoothness, *in vivo*)

## Peptide Vinci™ 02 IS

**Peptide to promote skin natural renewal; has also been clinically proven to help give the appearance of plump lips.**

INCI: Water (and) Butylene Glycol (and) Hexapeptide-3

Preservative system: preservative-free

Recommended use level: 0.25% to 1%  
(clinically tested at 0.25% with 0.5% ATPeptide IS)

- Helps promote skin renewal (*in vitro*)
- Enhances extracellular matrix protein synthesis (*in vitro*)
- Demonstrates a significant plumping, hydrating and smoothing effect on the lips (*in vivo*)

## Perenityl™ IS

**Based on clinical studies, this pear seed extract shows consumer perceivable wrinkle reduction and significant improvement in skin surface appearance**

INCI: Hexyldecanol (and)

Pyrus Communis (Pear) Seed Extract

Preservative system: preservative-free

Recommended use level: 2% to 3%  
(clinically tested at 2.5%)

- Pear seed extract rich in ursolic acid, flavonoids and phytosterols
- Powerful smoothing of skin microrelief
- Rapidly and significantly decreases wrinkles' appearance

## Phytocohesine™ PSP

**Visibly improves skin appearance and helps protect skin from environmental stress.**

INCI: Sodium Beta-Sitosterol Sulfate (and) Beta-Sitosterol

Preservative system: preservative-free

Recommended use level: 0.1% to 1%

(clinically tested at 1%)

- Helps reinforce the skin barrier
- Enhances keratin synthesis (*in vitro*)
- Protects skin moisture from UV and chemical aggression
- Helps improve hydration in normal and dry skin

## Phytoneomatrix™

(see Neomatrix™)

INCI: Water (and) Glycerin (and) Hydrolyzed Soybean Extract

Preservative system: sodium benzoate at 0.5%

Recommended use level: 1% (clinically tested at 1%)

## PhytoQuintescine ISR™

**An antioxidant, anti-stress, anti-aging extract designed to help protect skin from environmental stresses, as well as to help preserve skin resiliency.**

INCI: Water (and) Glycerin (and) Hydrolyzed Triticum Monococcum Seed Extract

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1.5%

- Einkorn extract rich in antioxidant peptides
- Helps preserve the skin from oxidative stresses (*in vitro*)
- Helps improve the natural defense mechanisms against oxidative stresses (SOD and catalase) (*in vitro*)

## NEW PhytoRNx Baobab™

**Baobab seed extract rich in plant small RNAs and associated with improved epigenetic homeostasis in aging skin.**

INCI: Water (and) Glycerin (and) Hydrolyzed Adansonia Digitata Extract

Preservative system: phenoxyethanol

Recommended use level: 1% to 3%

(clinically tested at 1%)

PhytoRNx Baobab is associated with age defying attributes and improved skin homeostasis:

- Increased collagen I and collagen III expression (*ex vivo*)
- Improved expression of Drosha and Dicer in senescent cells (*in vitro*)
- Limited increase in  $\beta$ -galactosidase senescence marker activity following Dicer silencing (*in vitro*)
- Significant reduction of the appearance of wrinkles on 18 volunteers (*in vivo*)

PhytoRNx Baobab is associated with long-lasting skin moisturization:

- Increased expression of hyaluronic acid (*ex vivo*)
- Increased expression of hyaluronan synthases (HAS2) (*in vitro*)
- Increased skin hydration (skin capacitance) 24 hours after application (*in vivo*)

## Prolixir-ICE™

(see Prolixir S20™)

INCI: Water (and) Glycerin (and) Hydrolyzed Rice Protein

Preservative system: sodium benzoate

Recommended use level: 1%

## Prolixir S20™

**Designed to help skin age gracefully.**

INCI: Water (and) Butylene Glycol (and) Dimer Tripeptide-43

Preservative system: phenoxyethanol, sodium benzoate

Recommended use level: 1% (clinically tested at 1%)

- Helps detoxify young and stressed skin
- Helps maintain natural defense of older skin
- Provides visible benefits by decreasing the appearance of skin wrinkles and improving skin tonicity and beauty

## Quintescine™ IS

**Glutathione-biomimetic antioxidant peptide to help preserve against glycation damage, to help protect skin from environmental stresses and prevents loss of skin resiliency.**

INCI: Water (and) Butylene Glycol (and) Dipeptide-4

Preservative system: preservative-free

Recommended use level: 0.25% to 2.5% (clinically tested at 2.5%)

- Glutathione-biomimetic synthetic peptide
- Helps preserve the skin from oxidative stresses
- Helps improve the natural defense mechanisms against oxidative stresses (SOD and catalase)
- Helps protect against glycation damage

## NEW Serenity™

**Condurango extract for skin detoxination, oxygenation and wellness**

INCI: Marsdenia cundurango bark extract and caprylic/capric triglycerides

Preservative system: preservative-free

Recommended use level: 1% (clinically tested at 1%)

Skin detoxination

- Increased TAS2R38, a bitter taste receptor associated with skin detoxination from environmental toxins (+25% ex vivo)
- Increased chemerin, an antimicrobial agent in the skin known to modulate skin immune defenses (+25% ex vivo)
- Increased involucrin, associated with skin barrier function (+23% ex vivo)
- Increased LC3 (+28%) and LAMP2 (+16%) related to skin detoxination from metabolic toxins (ex vivo)

Skin oxygenation

- Increased COX IV enzyme involved in cell oxygenation (+36% ex vivo)

Skin wellness

- Oxytocin-like benefit: reduced IL-6Rβ induced by stress, improving skin comfort (-14%, ex vivo)

Healthy glow

- Decreased Trans Epidermal Water Loss, indicating a better skin barrier function (-10%, in vivo)

## Signaline™ S

**A botanical inspired by the science of cellular activation signaling and designed to improve and maintain youthful skin appearance.**

INCI: Olea Europaea (Olive) Fruit Oil (and) Simmondsia Chinensis (Jojoba) Seed Extract

Preservative system: preservative-free

Recommended use level: 0.25% to 0.5%

- Optimizes skin renewal
- Increases intracellular ATP level (*in vitro*)
- Increases intracellular calcium (*in vitro*)
- Helps dermal renewal and ECM synthesis

## Suberliff™

**A clinically proven oil soluble botanical instant smoothing tensor that helps provide lift and firming to skin.**

INCI: Dipropylene Glycol (and) Quercus Suber Bark Extract

Preservative system: preservative-free

Recommended use level: 3% (clinically tested at 3%)

- Cork oak (quercus suber) extract rich in suberin
- Displays an instant smoothing, lifting and tensor effect
- Helps improve skin roughness

## Survixyl IS™

**Inspired by the science of stem cell biology and the potential benefits of maintaining the Stemness Recovery Complex™.**

INCI: Water (and) Butylene Glycol (and) Pentapeptide-31

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1.5% (clinically tested at 1%)

- Helps boost the Stemness Recovery Complex™ (*in vitro*, *ex vivo*)
- Helps preserve cells under conditions of stress (*in vitro*, *ex vivo*, *in vivo*)
- *In vivo* data from clinical studies demonstrate improved appearance in skin and self-rejuvenation

## Survixyl RZ™

(see Survixyl IS™)

INCI: Water (and) Glycerin (and) Hydrolyzed Rice Protein

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1.5%

## Telosense™

**Inspired by the science of telomeres and anti-aging.**

INCI: Water (and) Glycerin (and) Hydrolyzed Yeast Protein (and) Hydrolyzed Soy Protein

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1%  
(clinically tested at 1%)

- Associated with an increase of an important element of the Telomere Sheltering Complex™ (*in vitro*)
- Associated with an increase of lamin A expression in aging cells; lamins are implicated in nuclear DNA stability and gene expression (*in vitro*)
- Associated with a reduction in the accumulation of cellular aging markers, suggesting cellular senescence is delayed and cell longevity is improved (*in vitro*)
- Telosense biofunctional helps improve the appearance of the skin and reduce the appearance of wrinkles

## UCPeptide™ V

**Innovative peptide to help improve the appearance of cellulite.**

INCI: Water (and) Butylene Glycol (and) Pentapeptide-25

Preservative system: preservative-free

Recommended use level: 1%

- Synthetic peptide biomimetic of UCPs (uncoupling proteins)
- Helps limit the storage of lipids (*in vitro*)
- Reduces the appearance of vacuoles in adipocytes (*in vitro*)

## Vegetal Ceramides BGG™

**Rice extract clinically proven to improve skin moisturization.**

INCI: Butylene Glycol (and) Oryza Sativa (Rice) Bran Extract

Preservative system: preservative-free

Recommended use level: 1%

- Significantly increases skin hydration
- Reinforces skin barrier function
- Protects skin from environmental aggression

## Vital ET™

**A unique biofunctional complex of tocopheryl phosphate (Vitamin E derivative) designed for sensitive skin, which helps reduce the appearance of redness and swelling on skin.**

INCI: Disodium Lauriminodipropionate Tocopheryl Phosphates

Preservative system: phenoxyethanol, dehydroacetic acid, benzoic acid

Recommended use level: 1%

- Decreases the appearance of redness
- Clinically reduces the appearance of UV-induced redness
- Decreases skin's sensitivity to harsh environments
- Clinically demonstrated reduction of appearance of redness and discomfort of sensitive skin from shaving
- Clinically reduces the appearance of redness of acne lesions

# Vincience BioHAIRapy™ Hair Care Biofunctionals

## NEW Capauxein™ G2

**Inspired by the “hair fullness system™” associated with hair density**

INCI: Water, Glycerin, Hydrolyzed Corn Protein, Adenosine, Magnesium Ascorbyl Phosphate, Carnitine

Preservative system: sodium benzoate

Recommended use level: 1% in leave on applications

Capauxein G2 is associated with an increase in key biomarkers:

- Ki67 and  $\beta$ 1-integrin, markers of proliferation and communication respectively (*in vitro*, *ex vivo*)
- Versican and Noggin, highly expressed during the anagen phase in the dermal papilla (3D-spheres)

Capauxein G2 clinical results on 39 panelists

- A healthier scalp with less visible oiliness and more hydration (*in vivo*)
- A visible maintenance of the anagen phase (*in vivo*)
- A visible improvement of hair density and fullness (*in vivo*)

## Chromafend™

**Inspired by key pigmentation markers, unique flax extract selected to preserve hair's natural color pigment for a youthful appearance.**

INCI: Water (Aqua) (and) Glycerin (and) Hydrolyzed Linseed Extract

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1%

- Associated with an increase of tyrosinase expression (tyrosinase is associated with the production of melanin *ex vivo*)
- Associated with *in vitro* increase in TRP1 expression (TRP1 is associated with the production of melanin)
- Associated with *in vitro* increase in Pmel17 expression (Pmel17 is associated with favorable conditions for melanin synthesis)
- Associated with an *in vitro* increase of MITF expression (MITF is associated with the regulation of melanin synthesis)
- Associated with an *in vitro* increase of c-Kit expression (c-Kit is associated with melanin process)
- Associated with an *in vitro* increase of PAR-2 expression in keratinocytes (PAR-2 is associated with melanin transfer)

## Dynagen™

**Yeast extract inspired by key structured proteins for stronger and healthier looking hair.**

INCI: Water (and) Glycerin (and) Hydrolyzed Yeast Protein

Preservative system: sodium benzoate, potassium sorbate

Recommended use level: 0.5% to 1%

- Consumer-perceivable anti-hair fall benefit for stronger, thicker, healthier hair feel (*in vivo*)
- Associated with *in vitro* expression of key protein markers, k14, k17, k71, trichohyalin, all of which are associated with minimization of hair fall
- Associated with *in vitro* expression of collagen I (collagen may help protect hair against aging)
- Associated with *in vitro* expression of collagen IV and CD34 (both of these compounds are associated with healthy appearance of the hair)



## Procataline™

**Inspired by catalase, an antioxidant enzyme, pea extract to help your hair boost its inner defense against oxidative stress.**

INCI: Water (Aqua) (and) Glycerin (and) Pisum Sativum (Pea) Extract

Preservative system: sodium benzoate

Recommended use level: 0.5% to 1%

- Associated with an increase of p63 expression in stress conditions (p63 is associated with melanin production and may enhance hair growth and hair follicle preservation) (*in vitro*)
- Associated with a decrease of caspase-3 expression in stress conditions (caspases are a family of cysteine proteases, which play an essential role in apoptosis) (*in vitro*)
- With an increase of catalase enzyme expression (a decrease in catalase activity is associated with damage to the hair structure by UV and environmental damage and aging) (*in vitro*)

## Protectagen™

**Protectagen is associated with stem cell markers *ex vivo*, suggesting that it may help maintain stem cells in their niche environment and help the hair to preserve hair growth capital.**

INCI: Water (and) Glycerin (and) Hydrolyzed Rice Protein

Preservative system: sodium benzoate, potassium sorbate

Recommended use level: 0.5% to 1%

- Associated with increase of protein markers associated with hair follicle stem cells necessary for hair renewal (keratin-15,  $\alpha 6$  integrin,  $\beta$ -catenin and p63) (*in vitro*)
- May help protect against harmful UV damage, evidenced by the lower expression of p53 markers (*in vitro*)

## Vincience Biofunctional Ingredients

Trade Name	Anti-aging	Anti-stress	Anti-wrinkle	Antioxidant
Achromaxyl ISR	•			
Acnacidol BG				
Actopontine	•			
Aqua-Osmoline				
Aquarize IS	•			
ATPeptide IS				
Blumilight	•	•	•	•
Caspaline 14	•			
Chondricare IS	•	•		
Chronogen	•	•		
Chronogen YST	•	•		
Collaxyl IS	•		•	
Cotton Bloom 5S				
D'Orientine S	•		•	•
Dermostatyl IS	•		•	
Dynachondrine ISR	•	•		•
Ederline S	•		•	
Elixiance	•	•	•	•
GP4G SP	•	•	•	•
Harmoniance	•	•	•	•
Heliostatine ISR	•			
Laminixyl IS	•			
Lipigenine				
Marine Hydrolyzed Collagen LMW	•			
Neomatrix	•		•	
Oleanoline IS				
Orsirtine ISR	•			
Oxygenated Glycerol Triesters D				
Peptide Q10	•		•	•
Peptide Vinci 02 IS	•			
Perenityl IS	•		•	
Phytocohesine PSP	•			
Phytoneomatrix	•		•	
PhytoQuintescine ISR	•	•		•
PhytoRNx Baobab	•		•	
Prolixir S20	•			•
Quintescine IS	•	•		•
Serenityl	•	•		
Signaline S	•			
Suberlift				
Survixyl IS	•			
Telosense	•		•	
UCPeptide V				
Vegetal Ceramides BGG				
Vital ET				



## REGIONAL SALES OFFICES

### NORTH AMERICA

Bridgewater, NJ USA  
Tel: +1 800 505 8984

### LATIN AMERICA

São Paulo, Brazil  
Tel: +55 11 3649 0454  
+55 11 3649 0450

### EUROPE

Barcelona, Spain  
Tel: +34 93 298 0700  
Fax: +34 93 298 0705

### ASIA PACIFIC

Singapore  
Tel: +65 6775 5366  
Fax: +65 6775 5433

Shanghai, P.R. China  
Tel: +86 21 6090 6606  
Fax: +86 21 6090 6699

### MIDDLE EAST, AFRICA, INDIA

Turkey  
Tel: +90 216 538 08 00  
Fax: +90 216 538 08 80

[info.vincience@ashland.com](mailto:info.vincience@ashland.com)

[ashland.com](http://ashland.com)

® Registered trademark, Ashland or its subsidiaries, registered in various countries

™ Trademark, Ashland or its subsidiaries, registered in various countries

© 2017, Ashland / PC-12152.12

The information contained in this brochure and the various products described are intended for use only by persons having technical skill and at their own discretion and risk after they have performed necessary technical investigations, tests and evaluations of the products and their uses. This material is for informational purposes only and describes products for use as ingredients in cosmetic products intended to enhance appearance and provide other cosmetic benefits. Certain end uses of some products may be regulated pursuant to rules governing medical devices or other regulations governing drug uses. It is the end user's responsibility to determine the applicability of such regulations to its products. While the information herein is believed to be reliable, Ashland Inc. does not guarantee its accuracy and a purchaser must make its own determination of a product's suitability for purchaser's use, for the protection of the environment, and for the health and safety of its employees and the purchasers of its products.

Neither Ashland nor its affiliates shall be responsible for the use of this information, or of any product, method, formulation, or apparatus described in this brochure. Nothing herein waives any of Ashland's or its affiliates' conditions of sale, and no statement, information and data is to be taken as a guarantee, an express warranty, or an implied warranty of merchantability or fitness for a particular purpose, or representation, express or implied, for which Ashland and its affiliates assume legal responsibility. We also make no warranty against infringement of any patents by reason of purchaser's use of any information, product, method or apparatus described in this brochure.



[ashland.com](http://ashland.com) / efficacy usability allure integrity profitability™