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AQUA BIO TECHNOLOGY ASA



Aquabeautine XL®

The Natural &  
Gentle  
Skin Refinisher

## Background

The effects of **Aquabeautine XL®** on human skin were discovered by coincidence. Salmon hatchery workers reported that their hands became soft after sorting salmon eggs despite the prolonged exposure to cold water. This piqued the interest of scientists at the University of Bergen and led to the discovery of unique proteases and proteins released in surrounding water when salmon eggs hatch.



## Key features

**Aquabeautine XL®** is a patented protein solution derived from the hatching water of salmon roe or “red caviar” as it is otherwise known.

**Aquabeautine XL®** is:

- **Novel and unique.**
- **Mild enzymatic alternative to AHAs**, able to render comparable results without skin irritation.
- Proven to **tackle 6 signs of aging *in vivo*** (skin dullness, roughness, fine lines, wrinkles, hyperpigmentation and sagging) while keeping the skin moisturized.
- **100% natural and sustainable.**
- **Easy to formulate.**

**Aquabeautine XL®** is a gentle multifunctional ingredient to perfect the complexion, to get a younger looking skin with an improved, refined texture and a healthy glow.

## How it works

The hatching water is a potent protein solution. Concentrated in **Aquabeautine XL®**, these proteins deliver multiple benefits.

1. A **protease**, called the zonase, that helps the larva getting out of its egg shell by digesting this tough, fibrous protein structure but without harming the delicate baby fish, **gently exfoliates dead skin cells**. Like the enzymes naturally secreted by human skin, the zonase degrades specific cell binding sites in the stratum corneum, corneodesmosomes. Dead skin cells are gently detached while the living skin cells beneath remain untouched. Hence, the smooth skin of the hatchery workers!
2. **Egg shell proteins** penetrate and transport moisture and nutrition deeper into the *stratum corneum* and **replenish the skin**.
3. Specific **polypeptides** stimulate the growth and the differentiation of new cells for an **anti-aging effect**.

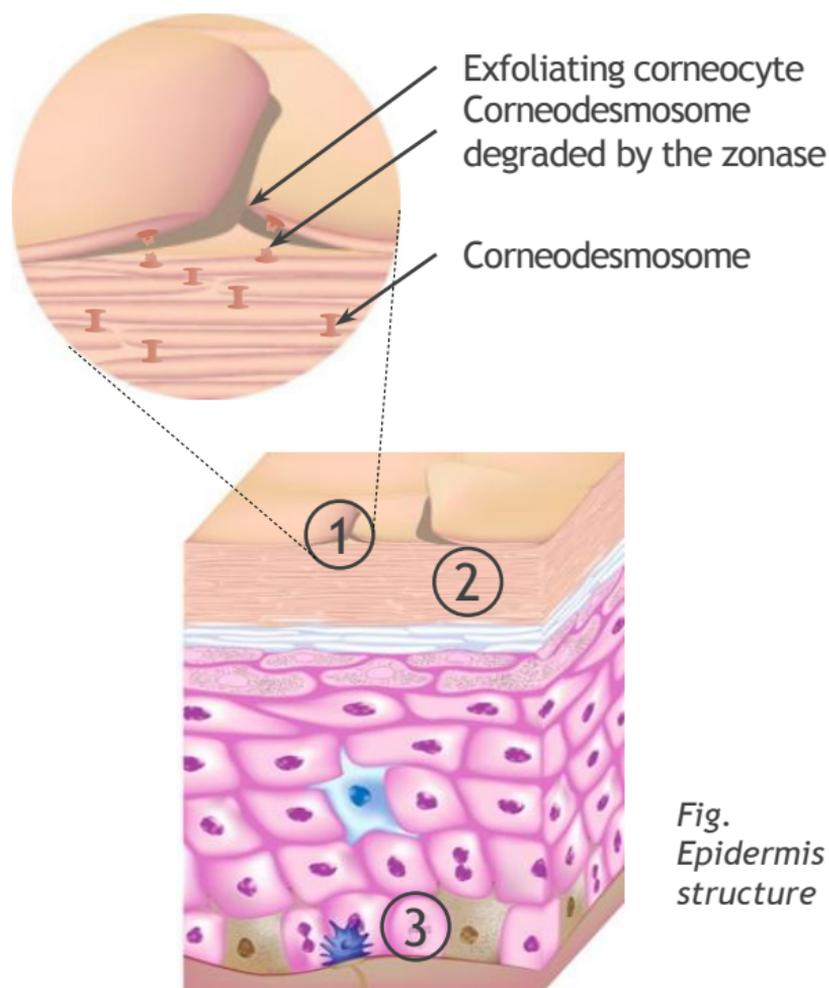


Fig.  
Epidermis  
structure

## Efficacy *in vivo*

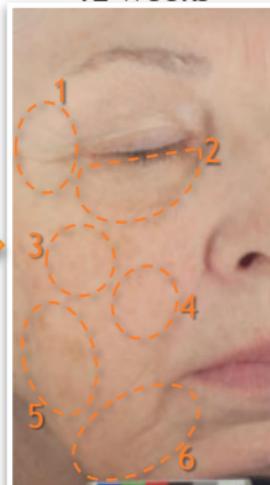
Single centre, double blind, placebo controlled trial  
1% Aquabeautine XL® in skin lotion on 35 women vs.  
placebo skin lotion on 32 women, ages 40-65

Tactile/visual clinical grading on both sides of the face

Baseline

2 weeks

12 weeks



VISIA CR  
photographs  
subject N°1,  
age 64

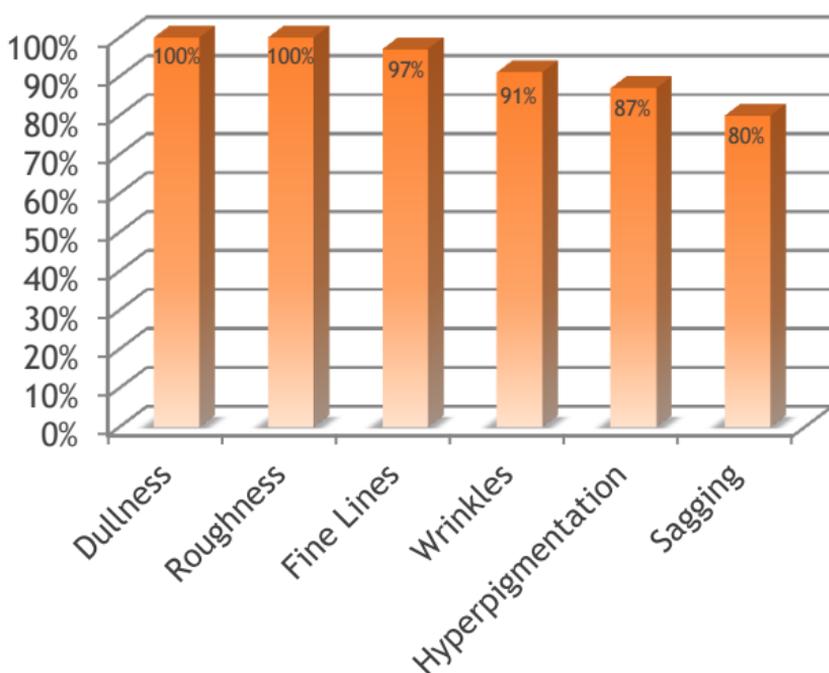
Significant and  
visible results  
after 2 weeks  
only!

Average change  
12 weeks/baseline

1. Wrinkles: **-14%\***
2. Fine lines: **-24%\***
3. Roughness: **27%\***
4. Dullness: **-36%\***
5. Hyperpigmentation: **-11%\***
6. Sagging: **-11%\***

(\*N=35,  $p < 0.05$ )

### % of Subjects Improved after 12 weeks



## Specifications

- INCI name: Hydrolyzed Roe  
Chinese translation: 水解魚卵  
Japanese translation: 加水分解魚卵
- Physical aspect: clear, colorless and odorless solution
- Preservative free
- pH range: 5.5 - 9, with maximum activity around pH 7.5
- Solubility: water soluble
- Stability: stable in emulsions for more than 3 years under normal conditions
- Toxicology: not toxic for humans (non-irritating, non-cytotoxic, non-sensitizing, non-mutagenic) or the environment
- Safety: GMO-free, BSE-free, CMR-free, free from heavy metals
- Recommended use level: 1%

**Aquabeautine XL®** can be used in most topical skincare products for face and body, even for the most delicate skins.



## Sustainability

Designed by nature, **Aquabeautine XL®** is obtained from a sustainable source and is **100% biodegradable**. It is extracted from the water after the natural hatching process is completed, without harming animals in any way.

**Aquabeautine XL®** is collected at a hatchery by a pristine fjord. Salmon eggs hatch in fresh water sourced from a secluded lake famed for the quality of its water. The production process is **eco-friendly**: low energy consumption and no environmental impact.



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