

## AnaGain™

# Stimulating hair growth and fighting hair loss



Based on sprouts of organic pea, AnaGain™ reduces hair loss by inducing dermal papilla cells to reactivate hair growth.

#### The issue

Hair loss affects both women and men. It is caused by an imbalance of the hair growth cycle leading to a reduced number of growing (anagen) hair combined with an increased number of degenerating (telogen) ones. Hair follicles undergo cyclical and asynchronous growth. This cycle is made up of 3 phases (anagen, catagen and telogen); each hair passes through the phases independent of the neighboring hairs.

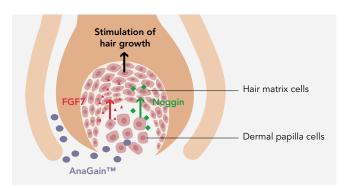
Hair loss, also called alopecia, is caused by an imbalance of the hair growth cycle which results from several factors (androgen metabolism, genetics and stress).

#### The solution

AnaGain™ was shown, thanks to the DNA microarray technique conducted on plucked hair follicles, to stimulate, in the dermal papilla (DP), specific signaling molecules which are required to initiate the growth of a new hair (noggin and FGF-7).

#### The benefit

By reactivating hair growth, AnaGain™ helps the hairs to keep their original density and thickness. After three months' treatment, AnaGain™ was found to reduce hair loss and to increase hair vitality: the proportion of hair that wasin the active growth phase could be significantly increased.



Mechanisms of AnaGain™



### The plant

AnaGain™ is based on organic pea sprouts. The pea (*Pisum sativum*) is a vegetable with pod fruits. Each pod contains several peas that are rich in proteins, starch and fibers. Sprouts from organic pea were selected as a source of AnaGain™ because of their richness in phytonutrients. These "health promoting phytochemicals" protect the plant from disease, damage, pathogens, extreme UV, pollutants and help to defend it against herbivores. Besides, many of these phytochemicals are known to exert beneficial effects on human health. Phytonutrients are highly abundant in sprouts because at this stage plants are not yet lignified and thus, especially vulnerable. This is why sprouts are the plant material with the highest level of phytonutrients.

**INCI (EU/PCPC) Declaration:** Pisum Sativum (Pea) Sprout Extract (and) Phenoxyethanol (and) Sodium Benzoate (and) Aqua/Water.

Preservative-free and powder version available (both COSMOS approved\*).



Volunteers: Hair bulbs plucked from the occipital area of the head of 10 volunteers (f, m, 46–60 y).

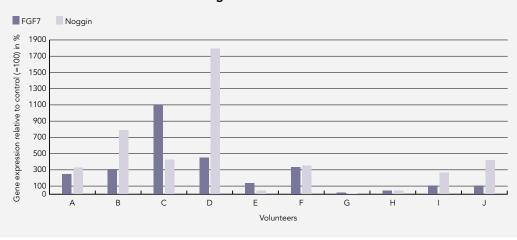
**Test compound:** Gel containing 2% AnaGain™

Treatment: Hairs were pulled out before and after a 14 day scalp-treatment (twice a day) with

a gel containing 2% AnaGain™.

Parameters: The expression of genes important in hair physiology (noggin and FGF-7).

→ Stimulation of DP to induce the growth of a new hair



#### Anti-Hair Loss Effect and Hair Growth Reactivation

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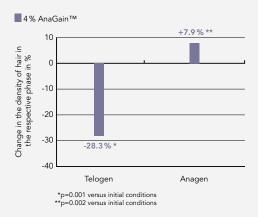


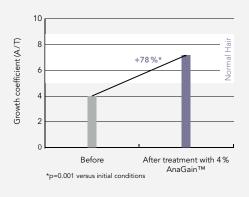
**Volunteers:** 20 volunteers suffering from mild to moderate hair loss

**Test product:** Gel containing 4% AnaGain™

**Treatment:** Application to scalp twice a day for three months **Parameters:** Density of anagen and telogen hair, growth coefficient

- → The anti-hair loss effect was observed on a very large part of the panel:
- decrease of the density of hair in the telogen phase in 85% of the volunteers
- increase of the density of hair in the anagen phase in 75% of the volunteers
- the increase of the growth coefficient by 78% in 85% of the volunteers





Recommended use level: 2-4%

**Characteristics:** Liquid, water-soluble, without alcohol, version without preservatives available **Applications:** Anti-hair loss, hair-regrowth formulations, anti-aging hair care products, tonics, serums, conditioners, masks, shampoos

#### Benefits AnaGain™

- Stimulates hair growth at the root
- Prolongs the life cycle of hair
- Fully restores the vitality of the hair
- For denser hair in just 3 months
- In vivo proven on women and men
- Organic source of the plant