

# CutiBiome CLR™ – Calibrating the skin's ecosystem

CutiBiome CLR™ is a synergistic complex of lipophilic extracts from manuka, black pepper and magnolia. It provides essential support for the natural balance between skin and its microbiota in difficult situations, like acne and dandruff.

CutiBiome CLR<sup>TM</sup> reduces the film forming activity and significantly inhibits the growth of virulent phylotypes of *Cutibacterium acnes (C. acnes)*. It strongly reduces inflammation involved in acne and dandruff. Sebum, comedones, pustules and pimples are reduced dramatically, as was confirmed by instrumental determinations and the volunteers themselves. Other *in vivo* studies showed potent reduction of dandruff. 4 weeks of 3 times weekly use of a hair tonic with CutiBiome CLR<sup>TM</sup> lead to similar results to Piroctone Olamine, but clearly outperformed it in reducing scalp oiliness, sensitivity and itch.

in vivo	ex vivo	in vitro
$\checkmark$		$\checkmark$

**Dosage:** 1.5–3.0% **pH range:** 4.0–7.0

INCI Name: Octyldodecanol, Leptospermum Scoparium Branch/ Leaf Oil, Piper Nigrum Seed Extract, Magnolia Officinalis Bark Extract

CutiBiome CLR™ is unpreserved

CutiBiome CLR™
For more formulation click or scan QR-code



### Skin benefits

- Synergistic complex of manuka, black pepper and magnolia
- Acts on the core problems of skin dysbiosis
- Reduces growth and biofilm formation of most virulent phylotypes of C. acnes
- Inhibits the expression of 5α-reductase and shows potent anti-inflammatory effects
- Noticeably reduces sebum, papules, pustules and comedones
- Potently acts against dandruff and scalp sensitivity
- Cosmos approved

### **Applications**

- Anti-acne
- Soothing, calming, anti-stress

## Marketing opportunities \*

- Restores balance to oily and troubled skin
- Fights the appearance of spots, shine and blocked pores
- Effectively targets breakouts of pimples for a healthy, balanced complexion
- Gently balances your skin's and scalp's microbiome
- Regulates sebum to effectively reduce dandruff and scalp oiliness
- Soothes scalp and reliefs itch caused by dandruff
- \* This list is for illustrative purposes only.

  Make sure to comply with relevant legislation.



### CutiBiome CLR™ – Selected efficacy studies – in vivo

#### **ACNE**

The activity of CutiBiome CLR<sup>TM</sup> (3%) on acne was assessed in an 8-week application study.

The study was performed as follows

- Application twice daily on face
- Before study: one-week washout phase (no use of cosmetics and oral anti-acne products)
- 20 volunteers, 17–42 yrs old, female (16) and male (4), mild to moderate acne
- Determination of sebum: Sebumeter® SM 815 (Courage + Khazaka electronic GmbH), 3 measurements at distinct time points per volunteer. Results were averaged.
- Expert grading by a trained assessor of the number of papules, comedones and pimples on one side of the face
- Questionnaire

Over the period of 8 weeks, sebum production was reduced by almost 41% (Fig. 1). Thirteen out of 20 volunteers already showed reduction of sebum after 1 week into the study. An interesting correlation could be found between the measured reduction of sebum and the perceived reduction of sebum. Sixty-five percent of the volunteers reported that they felt their skin was less oily after 1 week of use of the formulation with CutiBiome CLR<sup>TM</sup>. After 8 weeks, this number had increased to 80% (Fig. 2).

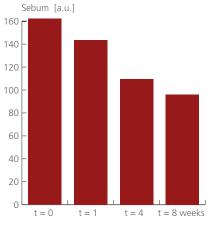


Fig. 1: Effect on sebum production as determined with Sebumeter

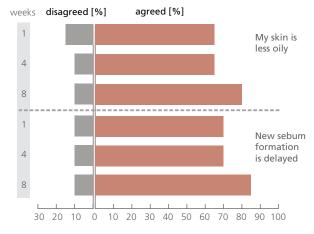


Fig. 2: Effect on skin oiliness in the perception of the volunteers

#### CLR

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#### **DANDRUFF**

The activity of CutiBiome CLR™ (1.5%) on dandruff was assessed in a 4-week-application study. In this study a comparison was made with a benchmark active ingredient for dandruff, Piroctone Olamine (0.1%).

The study was performed as follows

- Application on scalp 3 times per week after washing hair with neutral shampoo
- Total of 39 volunteers with clinical score of dandruff ≥2 and <5</p>
- 19 volunteers: Piroctone Olamine (0.1%), 21–63 yrs old, female (11) and male (8)
- 20 volunteers: CutiBiome CLR<sup>TM</sup> (1.5%), 20–68 yrs old, female (13) and male (7)
- Expert grading:
  - scalp oiliness
  - photography, Canon Ixus 30 (Canon Inc., Japan): general assessment of dandruff
  - micro-photography, I-scope (Moritex Corporation, Japan): assessment of dandruff
- Ouestionnaire

An assessment using micro-photography, however, showed that CutiBiome CLR<sup>TM</sup> was more effective than Piroctone Olamine (Fig. 3 and Fig. 4).



Fig. 3: Assessment of reduction of dandruff on 3 volunteers with micro-camera (CutiBiome CLR™, 1.5%)

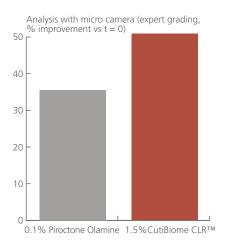


Fig. 4: Results obtained with assessment of reduction of dandruff with micro-camera



