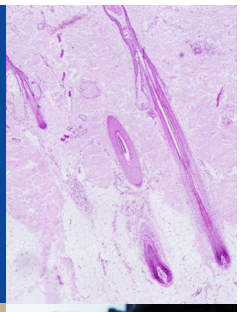
MONASTERIUM LABORATORY

A QIMA Life Sciences Company

All about skin and hair bioscience!

State-of-the-art technology and expertise for all your pre-clinical, mechanistic, and clinical needs in dermatology research.



- Pre-clinical Research
- Clinical Research
- Education

"We combine our unique expertise, our project design creativity, and our passion to advance our clients' success in delivering novel and game-changing skin and hair research solutions"

Founder & CEO:
Prof. Dr. Ralf Paus

Your one-stop source for all *in vitro*, *ex vivo* and *in vivo* testing plus additional services.

Reasons why you should choose Monasterium Laboratory:

- Cutting edge methodologies and techniques
- Tailor-made & customized assays for all needs
- A focus on novel targets and therapeutics for skin & hair disorders: identify-characterize-validate
- Delivering mechanistic action stories, biomarkers & predictors of response
- Claims support for cosmetic ingredients in skin or hair follicle models
- Clinical trials carried out with strategic partners for healthy skin and hair benefits
- Comprehensive project reports & manuscript drafting and submission

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www.monasteriumlab.com

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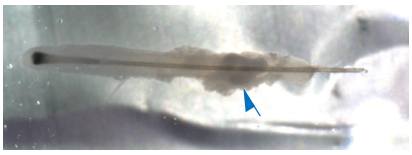
HUMAN EX VIVO MODELS TO INVESTIGATE COMPOUNDS FOR THE MANAGEMENT OF OILY SKIN AND ACNE VULGARIS

Acne vulgaris, commonly known as acne, is an inflammatory skin condition affecting mainly adolescents. It is caused by obstruction of the hair follicles resulting from dysfunctional keratinocyte differentiation leading to over-production of sebum by sebaceous glands and dysbiosis. The primary underlying cause is hormonal dysfunction but additional factors influencing severity of the condition have been also described (e.g. diet or changes in the composition of skin and hair follicle microbiota.)

Our method: *ex vivo* organ culture

Human full thickness skin with terminal hair follicles and sebaceous glands

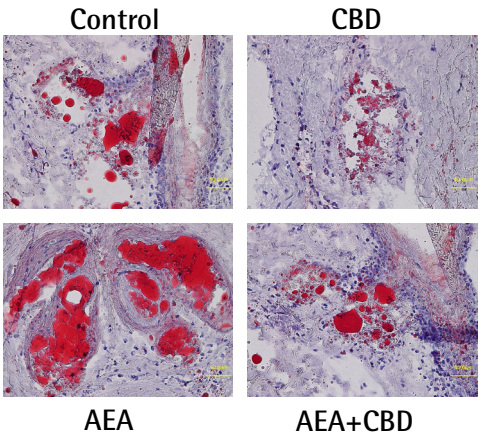


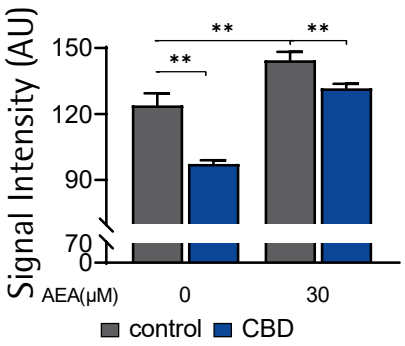
Human microdissected full-length hair follicles with sebaceous glands

Claim substantiation:
Reduction of inflammation & regulation of sebum production

INVESTIGATING THE EFFECT OF TEST COMPOUNDS ON SEBUM PRODUCTION AND SEBOCYTE FUNCTION IN HUMAN (SCALP) SKIN *EX VIVO*

CBD treatment reduces the lipid content of sebaceous glands in human skin ex vivo

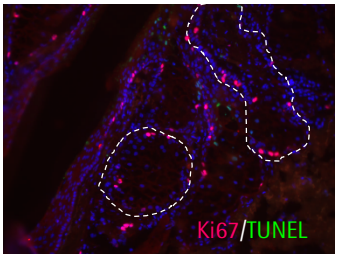




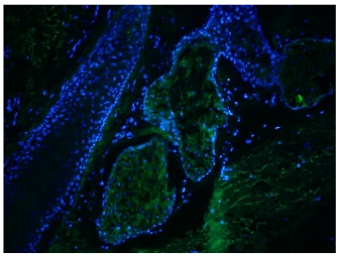
(Olah et al., J Clin Invest 2014)

AEA (anandamide): an endocannabinoid known to increase sebum production; CBD: Cannabidiol (CBD)

Read-out parameters for sebocyte function



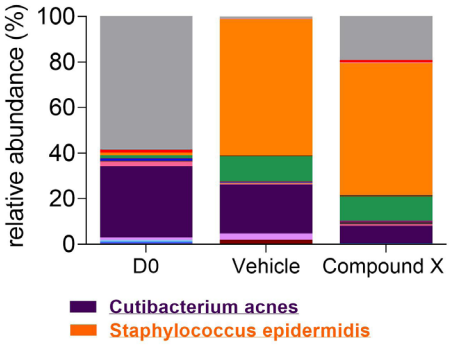
Analysis of sebocyte proliferation (Ki67) and apoptosis (TUNEL)



Analysis of Keratin 7 expression, an early sebocyte differentiation marker, in sebaceous glands

INVESTIGATING THE EFFECT OF A TEST COMPOUND ON MICROBIOME COMPOSITION IN HUMAN HAIR FOLLICLES *EX VIVO*

Compound X reduces the presence of Cutibacterium acnes



16S RNA sequencing of 9 full-length microdissected HFs of three independent donors for cultured HFs, or 6 HFs of two independent donors on D0.

Selections of our publications: Olah et al., J Clin Invest 2014; Hinde et al., Exp Dermatol. 2013; Géczy et al., J Invest Dermatol. 2012; Schneider and Paus Int J Biochem Cell Biol. 2010

Additional services from QIMA Life Sciences

- 2D/3D sebocyte cell line
- Androgen response
- Lipid analyses (MS/LS)

www.qima-lifesciences.com

Contact us

for a customized study

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