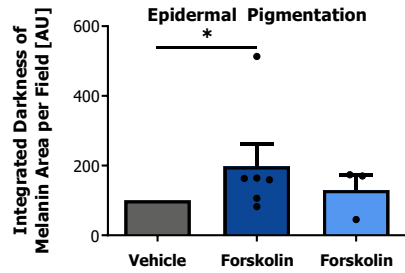


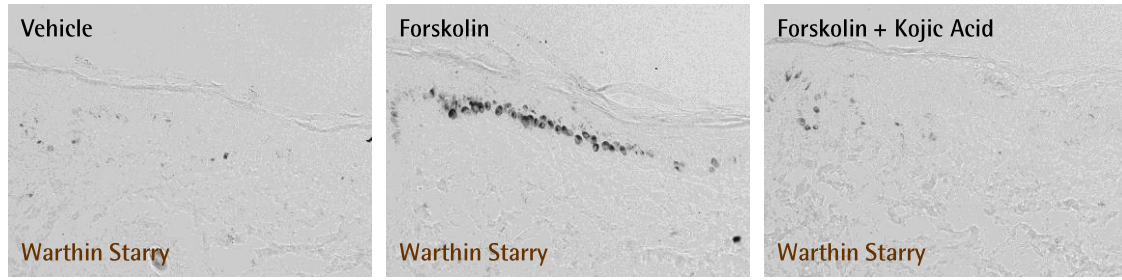
# Investigating the effect of a test compound on skin pigmentation

## Study example: Forskolin stimulates pigmentation in the skin

### 1. Forskolin stimulates melanin production



Data from one experiment, n = 3-6 donors. Mean±SEM



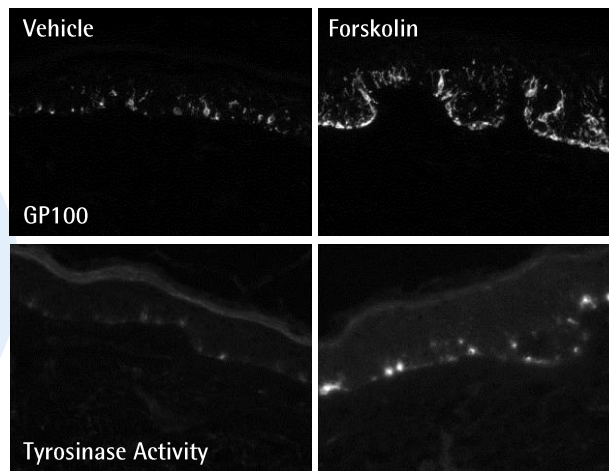
Warthin Starry: Histochemical staining revealing melanin content

Forskolin is found in the roots of the Coleus Forskohlii plant, and is a stimulator of melanogenesis. Kojic Acid (KA), i.e. tyrosinase inhibitor

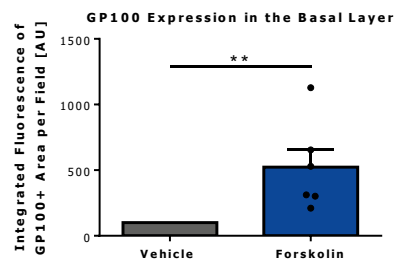
#### Claim substantiation:

- skin lightening
- skin tanning

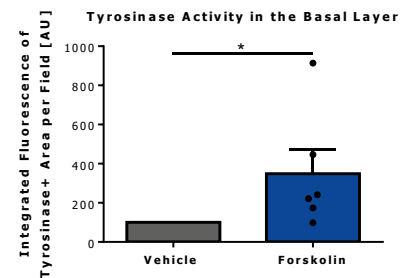
### 2. Forskolin promotes the formation of new melanosomes



GP100 immunofluorescence revealing melanosomes, the melanin-producing organelle



Data from one experiment, n = 6 donors. Mean±SEM. \*P<0.05

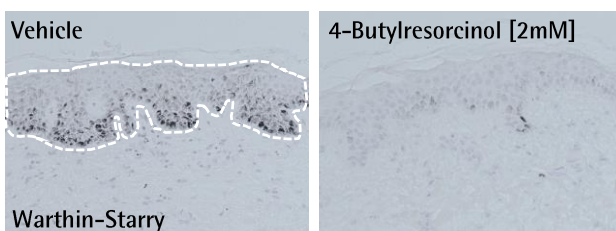


Selection of our publications on the topic:  
Bertolini et al., Int J Cosmet Sci. 2020; Hardmann et al., J Invest Dermatol 2015; Samuelov et al., J Invest Dermatol 2013; Gaspar et al., J Invest Dermatol 2011; Florei et al., Pigment Cell Melanoma Res 2011.

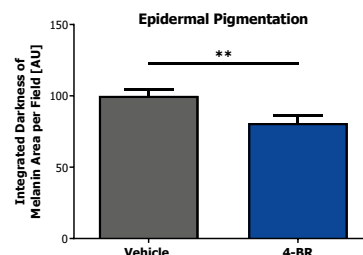
Our method: *ex vivo* organ culture of full-thickness human skin (Lu et al., Exp Dermatol 2007)

Read-outs: Skin Pigmentation, Skin Lightening, Melanocyte Maturation, Melanin Transfer, Activation of Melanogenesis, ...

## Study example: Topical application of 4-BR inhibits epidermal melanogenesis



4-BR: hypopigmenting agent and tyrosinase inhibitor



Data from 5 donors. Mean±SEM. \*\*P<0.01

Contact us for a customized study:

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For more details see also our webpage:  
[www.monasteriumlab.com](http://www.monasteriumlab.com)

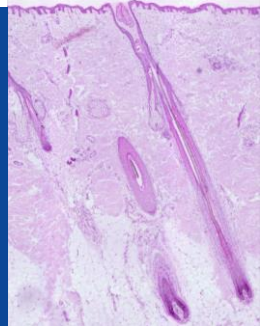


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