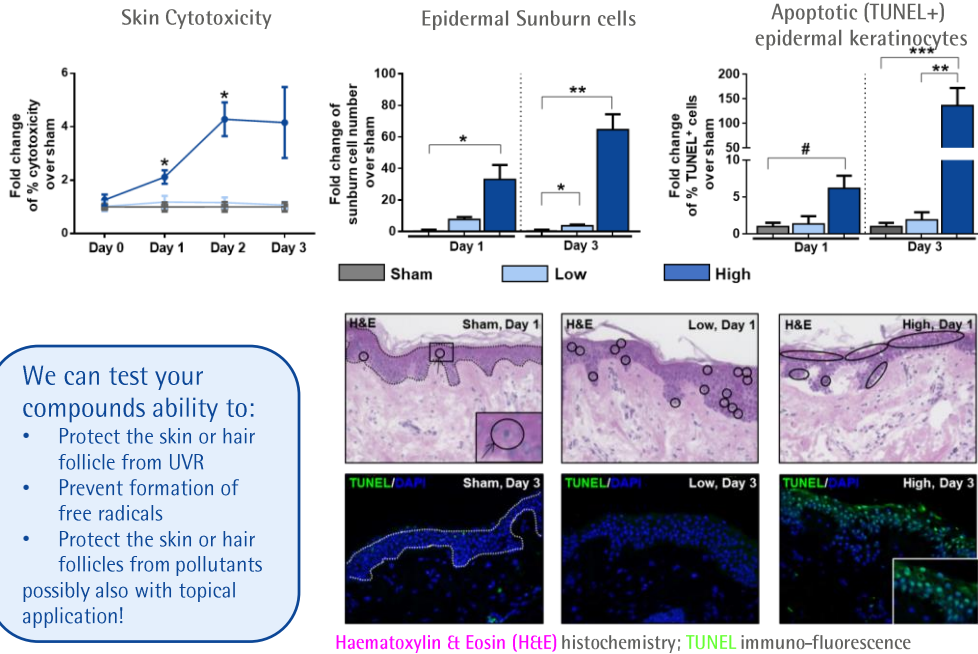


Investigating the effect of UV irradiation on skin

Study example: UVR exerts skin cytotoxicity and epidermal damage *ex vivo*



low = 10J/cm² UVA + 20mJ/cm² UVB
 high = 50J/cm² UVA + 50mJ/cm² UVB
 (solar UV spectrum)

Our method:
 Human full-thickness skin *ex vivo* organ culture

Stressors available: UVR, pollution, hydrogen peroxide,...

Read-outs: viability, proliferation and apoptosis, necroptosis, DNA damage, sunburn cells...

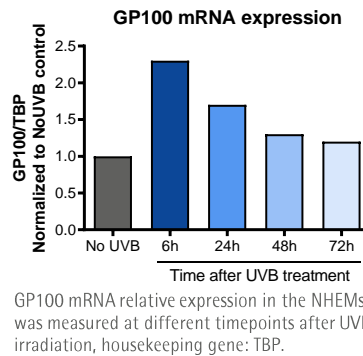
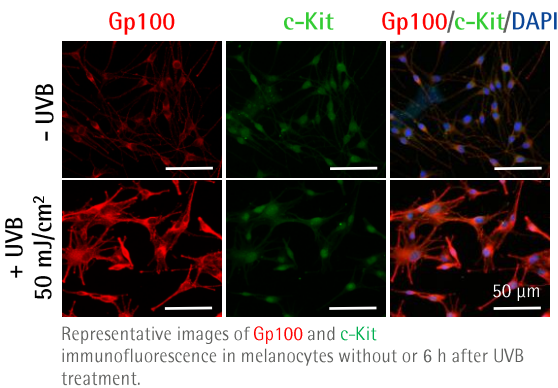
We can test your compounds ability to:

- Protect the skin or hair follicle from UVR
- Prevent formation of free radicals
- Protect the skin or hair follicles from pollutants possibly also with topical application!

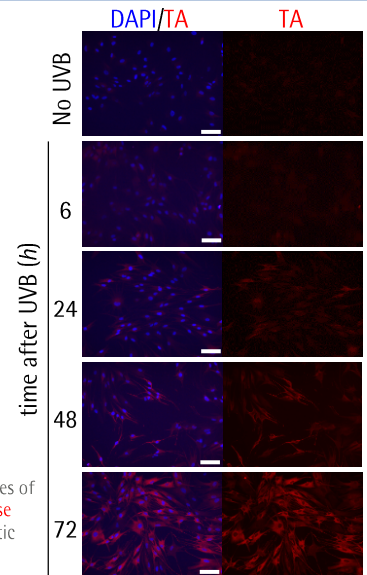
Selection of our publications on the topic:
 Gherardini et al., Int J Cosm Sci 2019; Poeggeler et al., Exp Dermatol 2010; Lu et al., J Invest Dermatol. 2009; Bodo et al., Am J Pathol 2007

Study example: UVR stimulates melanogenesis *in vitro*

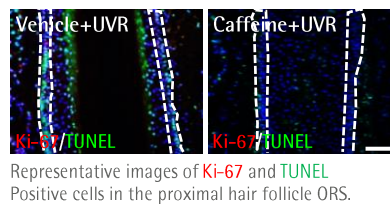
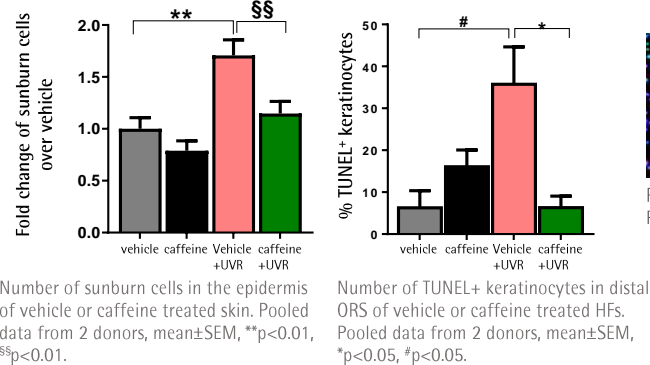
UVB treatment of melanocytes increased the expression of the melanogenesis associated marker GP100 and the level of tyrosinase



Representative images of the level of tyrosinase detected by enzymatic activity assay.



Study example: Caffeine protects cells from UV damage *ex vivo*



Contact us for a customized study:

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For more details see also our webpage:
www.monasteriumlab.com

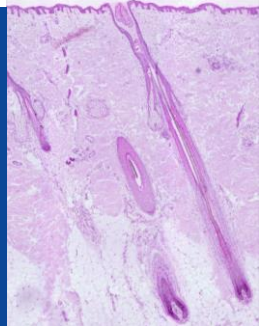


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