



Technology Offer

## **A novel class of herbal compounds *saiginols* with strong UV-B absorbing properties**

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**UV-B radiation is a major damaging agent which causes damage to skin and eyes, results in UV degradation in many natural and synthetic materials and leads to discoloration of dyes and pigments. To persist strong UV-B radiation, plants produce additional antioxidant pigments that belong to the chemical compound family of phenylpropanoids. Since many conventional compounds with sunscreen protection potential do not enter the market due to toxic side effects or bear the risk to become environmental pollutants when accumulating in natural resources, application of herbal compounds with UV absorbing properties are of great interest for industry.**

### **Technology**

Researchers from the Max-Planck-Institute of Molecular Plant Physiology have characterized and isolated a novel class of phenylacylated flavonols, called saiginols that considerably contribute to UV-B protection in plants due to increased UV-B absorption properties. Gene manipulation causing saiginol overproduction protects plants significantly from damage induced by strong UV-B radiation (1).

Such novel, non-toxic compounds can be applied as natural, sustainable and ecofriendly UV filter in many materials like paints, sunglasses, windows, clothes or UV protection films.

### **Advantages**

- Simple production of a novel herbal compound with strong UV-B absorbing properties
- Use of formulations and compositions comprising such compounds for the protection of biological or non-biological material

We are now looking for collaboration and licensing partners to further develop this project.

### **Publication**

(1) Tohge, T. et al., Nat. Commun. 7:12399 doi: 10.1038/ncomms12399 (2016)

### **Patent Information**

A PCT application was filed on June, 8th 2016: WO2016198485A1. National in EP, US and AU.

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