

Soliance - Glabriliance  
Powerful lightening active  
ingredient



Givaudan

engage your senses



# Glycyrrhiza glabra



Glycyrrhiza glabra L.

Licorice, *Glycyrrhiza glabra*, is a plant that has traditionally been used in local medicines (China, Greece or Egypt) for its soothing and fortifying properties.

In cosmetics, licorice root extract is known for its lightening properties and is regularly used in the soothing and anti-inflammatory formulations.

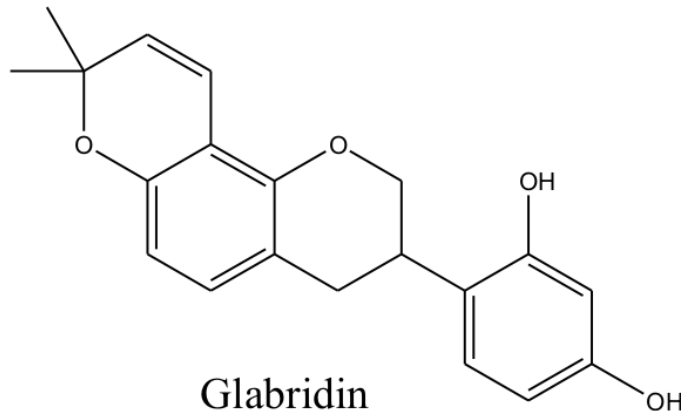
# Production process



**Glabriliance** is obtained from licorice root coming from India through a controlled supply.

After harvesting and cleaning roots, glabridin is obtained by an extraction process.

Among all the components of licorice root, only glabridin shows lightening properties.



**Glabriliance is a high purity powder containing more than 95% of glabridin.**

# Biological activity

Glabriliance shows a double efficacy on the skin:

## **Lightening activity**

Inhibition of tyrosinase, key enzyme involved in melanogenesis process.

➤ in vitro test

## **Anti-inflammatory activity**

Inhibition of cyclooxygenase, enzyme involved in inflammatory mechanisms.

➤ in tubo test

**Glabriliance, lightening and soothing active ingredient.**

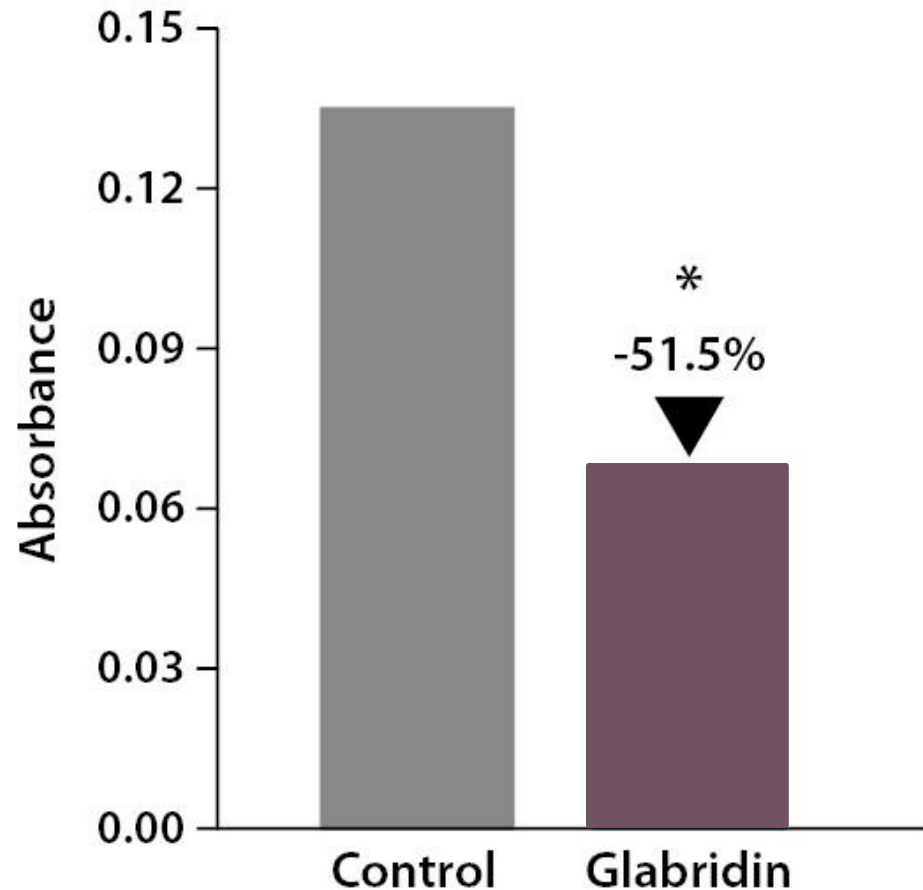
# Lightening activity – tyrosinase inhibition

## In vitro test

### Protocol\*:

B16 melanocyte cultures were treated with 1 µg/ml Glabridin Vs control during 3 days. Melanin content was assessed using a spectrophotometer.

**Thanks to its anti-tyrosinase activity, glabridin strongly inhibits melanin production.**



Réf: The inhibitory effect of Glabridin from Licorice extracts on Melanogenesis and Inflammation, T.Yokota & al., Pigment cell research, ISSN 0893-5785

# Anti-inflammatory activity –cyclooxygenase inhibition

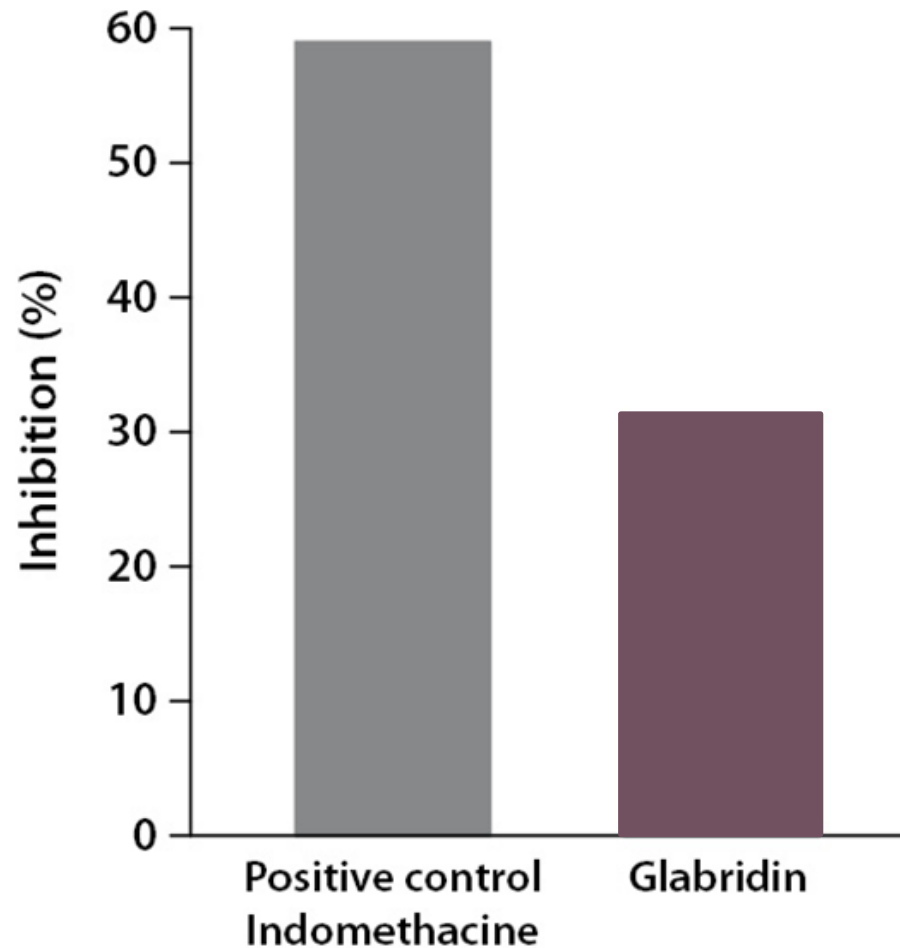
## In tubo test

### Protocol\*:

Cyclooxygenase activity is measured through the quantity of dissolved oxygen. The assay mix contains :

- 40µg/ml hemoglobin
- 10 mM arachidonic acid
- 6.25 µg/ml glabridin or indomethacine (positive control).

**Glabridin is a powerful inflammation inhibitor.**



\* Reference: The inhibitory effect of Glabridin from Licorice extracts on Melanogenesis and Inflammation, T.Yokota, H. Nishio, Y. Kubota, M. Mizoguchi, Pigment cell research, ISSN 0893-5785

# Cosmetics uses

## Characteristics

**INCI:** Glycyrrhiza glabra (licorice) root extract

**Appearance:** Powder

**Color:** White

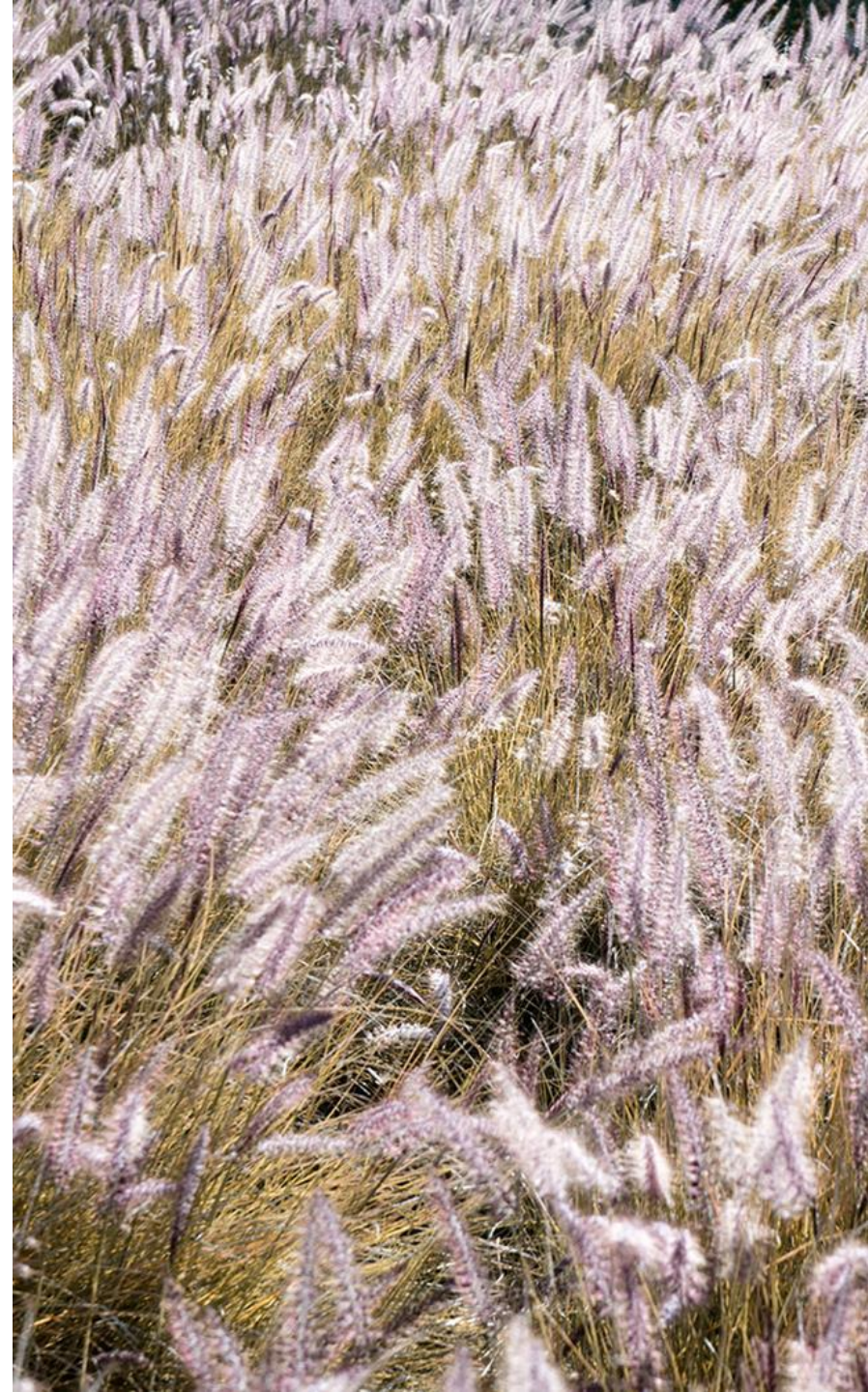
**Purity:** > 95%

**Dosage:** > 0.01%

**Preservative :** None

**Glabriliance is recommended for:**

- lightening products
- anti-aging products, for age-spot prevention.
- products for sensitive skins



High purity vegetable ingredient.

Preservative free.

Strong lightening activity.

Anti-inflammatory and soothing activity.



# Thank you

Soliance - Glabriliance  
Powerful lightening active ingredient

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