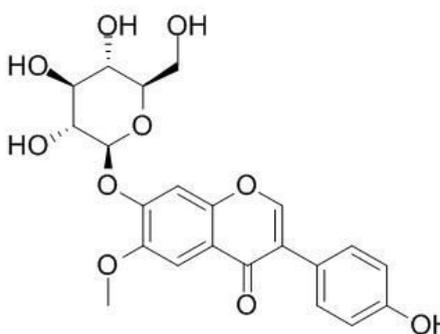


## Glycitin Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)**[ Product Information ]****Name:** Glycitin**Catalog No.:** CFN99105**Cas No.:** 40246-10-4**Purity:** > 98%**M.F:** C<sub>22</sub>H<sub>22</sub>O<sub>10</sub>**M.W:** 446.41**Physical Description:** White cryst.**Synonyms:** 3-(4-Hydroxyphenyl)-6-methoxy-7-[[[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)-2-oxanyl]oxy]-1-benzopyran-4-one.**[ Intended Use ]**

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Ingredient in supplements, beverages;
7. Others.

**[ Source ]**The seed of *Glycine max (L.) Merr.*

## **[ Biological Activity or Inhibitors ]**

An isoflavone glycitin is isolated from the licorice, which has good inhibitory effect on  $\alpha$ -glucosidase with IC<sub>50</sub> of 0.5646 mg·mL<sup>-1</sup>, better than the position control acarbose. [1]

Glycitin, daidzin, and genistin may modulate differentiation of MSC to cause a lineage shift toward the osteoblast and away from the adipocytes, and could inhibit adipocytic transdifferentiation of osteoblasts, they could also be helpful in preventing the development of osteonecrosis. [2]

Glycitein has a protective effect on skin aging by inhibiting of MMP-1 and increasing of collagen through ERK/JNK/P38 down-regulation, which may be mediated by the inhibition of ERK, JNK, and p38 mitogen-activated protein kinases, suggests that glycitin is a potential agent for the treatment of skin ageing. [3]

A mixture of daidzin and glycitin has anti-obese and anti-diabetic effects on C57BL/6J mice fed with a high-fat diet by the regulation of oxidative stress. [4]

## **[ Solvent ]**

Pyridine, DMSO, Ethanol, Methanol.

## **[ HPLC Method ]** [5]

Mobile phase: Acetonitrile -H<sub>2</sub>O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

The wave length of determination: 260 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

- [1] Feng C, Weiwei Y U, Gan Q, *et al. Sci. Technol. Rev.*, 2014, 32(16):29-33.
- [2] Xiang-Hui L I, Zhang J C, Sui S F, *et al. Acta Pharmacol. Sin.*, 2005, 26(9):1081-6.
- [3] Seo G Y, Park S, Huh J S, *et al. J. Korean Soc. App. Bi.*, 2014, 57(4):463-8.
- [4] Zang Y, Igarashi K, Yu C. *Biosci. Biotech .Bioch.*, 2014, 79(1):117-23.
- [5] Bo R U, Zhang Y H, Zhang Y. *Practical Pharmacy & Clinical Remedies*, 2011, 14(2):138-40.

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