Natural Products



Crocin II Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Crocin II

Catalog No.: CFN99928

Cas No.: 55750-84-0

Purity: >=98%

M.F: C₃₈H₅₄O₁₉

M.W: 814.83

Physical Description: Dark red powder

Synonyms:1-[(2E,4E,6E,8E,10E,12E,14E)-b-D-glucopyranosyl2,6,11,15-tetramethyl-2,4,

6,8,10,12,14-hexadecaheptaenedioate] 6-O-b-D-glucopyranosyl-b-D-Glucopyranose;

8,8'-Diapo- Ψ , Ψ -carotenedioic acid, β -D-;Crocetingentiobiosylglucosyl ester;

Glucopyranosyl 6-O- β -D-glucopyranosyl- β -D-.

[Intended Use]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Synthetic precursor compounds;
- 4. Intermediates & Fine Chemicals;
- 5. Dyes and Pigments;
- 6. Others.

[<u>Source</u>]

The stigma of Crocus sativus L.

[Biological Activity or Inhibitors]

Crocin has anti-inflammatory and anti-apoptotic effects against gastric ischemia-

reperfusion injury in rats, the effect of crocin is mainly mediated by reducing the protein expression of iNOS and caspase-3.^[1]

Crocin can ameliorate CCI4-induced liver injury via inhibition of inflammatory cytokines, caspase3 and oxidative stress along with modulation of liver metabolizing enzymes favoring elimination of CCI4 toxic metabolite.^[2]

Crocin has antihyperlipidemic effect, may be due to the inhibition of pancreatic lipase and crocin, and its metabolite, crocetin, can improve hyperlipidemia. ^[3]

Crocin has antidepressant effects by increasing CREB, BDNF and VGF levels in hippocampus.^[4]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[5]

Mobile phase: Acetonitrile-0.1% Phosphoric acid H2O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 440 nm.

[Storage]

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

[References]

[1] Mard S A, Nikraftar Z, Farbood Y, et al. Braz. J. Pharm. Sci, 2015, 51(3):637-42.

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[3] Lee I A, Lee J H, Baek N I, et al. Biol. Pharm. Bull., 2005, 28(11):2106-10.

[4] Hassani F V, Naseri V, Razavi B M, et al. Daru Journal of Faculty of Pharmacy Tehran

University of Medical Sciences, 2014, 22(1):166-166.

[5] Zhang L J, Liu Q S, Liu Y, et al. China Pharmacy, 2011, 22(7):630-2.

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