[Toutes les photos \(1\)](#)

Documents

[FDS](#)[COO/COA](#)[Fiche des caractéristiques](#)[Plus de documents »](#)**17304** ▶ **Sigma-Aldrich.**

Crocin

★★★★★ (0)

for microscopy

Synonyme(s):

Crocetin digentiobiose ester

Empirical Formula (Hill Notation):

 $C_{44}H_{64}O_{24}$

Poids moléculaire:

976.96

Numéro EC:

255-881-6

Numéro MDL:

MFCD00017495

ID de substance PubChem:

57647630

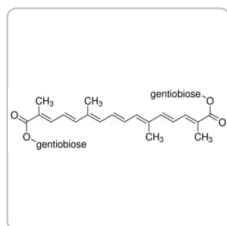
NACRES:

NA.47

Référence	Conditionnement	Disponibilité		Prix	Quantité
17304-1G	1 G	✓ Only 2 left in stock (more on the way)	Détails...	31,60 €	- +
17304-5G	5 G	✓ Only 5 left in stock (more on the way)	Détails...	109,00 €	- +

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PRODUITS RECOMMANDÉS

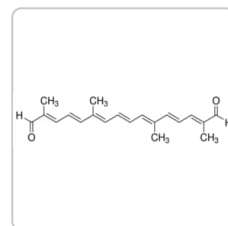


PHL80391

Crocine

phyproof® Reference Substance

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Supelco

18804

Crocetin dialdehyde

analytical standard

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PROPRIÉTÉS

Qualité	for microscopy
Niveau de qualité	100
Forme	solid
Temp. de stockage	2-8°C
SMILES string	<chem>CC(=C\C=C\C=C(C)\C=C\C=C(/C)C(=O)O[C@@H]1O[C@H](CO[C@@H]2O[C@H](CO)[C@@H](O)[C@H](O)[C@H]2O)[C@@H](O)[C@H](O)[C@H](O)[C@H]1O)\C=C\C=C(\C)C(=C)CO[C@@H]3O[C@H](CO[C@@H]4O[C@H](CO)[C@@H](O)[C@H](O)[C@H]4O)[C@@H](O)[C@H](O)[C@H]3O</chem>

InChI	1S/C46H68O23/c1-21(12-8-14-23(3)25(5)18-62-43-40(59)36(55)32(51)28(67-43)19-63-44-38(57)34(53)30(49)26(16-47)65-44)10-6-7-11-22(2)13-9-15-24(4)42(61)69-46-41(60)37(56)33(52)29(68-46)20-64-45-39(58)35(54)31(50)27(17-48)66-45/h6-15,26-41,43-60H,5,16-20H2,1-4H3/b7-6+,12-8+,13-9+,21-10-,22-11+,23-14-,24-15+/t26-,27-,28-,29-,30-,31-,32-,33-,34+,35+,36+,37+,38-,39-,40-,41-,43-,44-,45-,46+/m1/s1
InChI key	LUVDBMJRTUBHNN-RSXXRLSLSA-N

Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)

DESCRIPTION

Description générale

Crocin (CR) is a water-soluble carotenoid found in *Gardenia jasmi-noides* Ellis and *Crocus sativus* (saffron). It has two D-gentiobioside glycosyl esters in its structure. CR is one of the major bioactive compounds of saffron contributing to its red color.

A highly unsaturated diterpene dicarboxylic acid ester found in saffron.

Application

Crocin has been used:

- as a reference standard to detect its presence in *Crocus sativus* L. extract using high-performance liquid chromatography technique
- to investigate its protective effects as an antioxidant and anti-inflammatory agent against doxorubicin-induced nephrotoxicity in rats
- to test antitumor effects and its role in promoting autophagy and apoptosis and inhibiting the progression of cervical cancer on SiHa cells and female BALB/c nude mice
- as a co-treatment with cisplatin to test its protective effect against cisplatin (CIS)-induced testicular toxicity in rats

Actions biochimiques/physiologiques

Crocin alleviates some ethanol-induced impairments of learning and prevents ethanol-induced inhibition of hippocampal long-term potentiation (LTP), a form of activity-dependent synaptic plasticity that may underly learning and memory. Related CNS effects are specific to the digentiobiose ester; crocetin glucose gentiobiose ester is half as potent, and the diglucose ester has no effect at all.

Crocin exerts antioxidant, anti-inflammation, anti-cancer, antidegenerative, and antidiabetic properties.

Autres remarques

Tandem Mass Spectrometry data independently generated by Scripps Center for Metabolomics is available to view or download in PDF. [17304.pdf](#) Tested metabolites are featured on Scripps Center for Metabolomics METLIN Metabolite Database. To learn more, visit sigma.com/metlin.

INFORMATIONS SUR LA SÉCURITÉ

Code de la classe de stockage

11 - Combustible Solids

WGK

WGK 3

Flash Point(F)

Not applicable

Point d'éclair C

Not applicable

Équipement de protection individuelle

Eyeshields, Gloves, type N95 (US)

DOCUMENTATION

Certificat d'analyse

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (COA)

Rechercher

Certificat d'origine

Saisir un numéro de lot pour rechercher un certificat d'origine (COO).

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (COO)

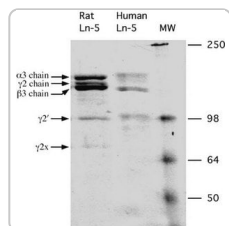
Rechercher

Plus De Documents

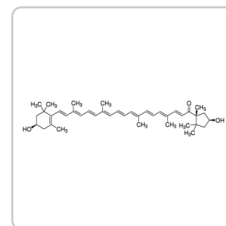
[Structure Search](#)

[FDS](#)

LES CLIENTS ONT ÉGALEMENT CONSULTÉ



Sigma-Aldrich

CC145**Rat Laminin-5**
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Sigma-Aldrich

19081**Capsanthin**

≥90.0% (HPLC)

[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

The effects of crocin, mesalazine and their combination in the acetic acid-induced colitis in rats.

Amir Faramarzpour et al.*Veterinary research forum : an international quarterly journal*, 10(3), 227-234 (2019-11-19)

Crocin, as a carotenoid compound of saffron, exerts a potent antioxidant property. Mesalazine is frequently used in the treatment of ulcerative colitis. This study investigated the effects of separated and combination treatments with crocin and mesalazine in a rat model

Crocin promotes non-rapid eye movement sleep in mice.

Mika Masaki et al.*Molecular nutrition & food research*, 56(2), 304-308 (2011-11-01)

Crocus sativus L. (saffron) has been traditionally used for the treatment of insomnia and other diseases of the nervous systems. Two carotenoid pigments, crocin and crocetin, are the major components responsible for the various pharmacological activities of *C. sativus* L.

Plant Polyphenols and Exendin-4 Prevent Hyperactivity and TNF-α Release in LPS-Treated

Francesca Gullo et al.*Frontiers in neuroscience*, 11, 500-500 (2017-09-22)

Increasing evidence supports a decisive role for neuroinflammation in the neurodegenerative process of several central nervous system (CNS) disorders. Microglia are essential mediators of neuroinflammation and can regulate a broad spectrum of cellular responses by releasing reactive oxygen intermediates, nitric

An on-line high performance liquid chromatography-crocin bleaching assay for detection of antioxidants.

Olga Bountagkidou et al.

Journal of chromatography. A, 1237, 80-85 (2012-03-31)

An on-line HPLC (high performance liquid chromatography) method for the rapid screening of individual antioxidants in mixtures was developed using crocin as a substrate (i.e. oxidation probe) and 2,2'-azobis(2-amidinopropane dihydrochloride (AAPH)) in phosphate buffer (pH 7.5) as a radical generator.

Effect of saffron (*Crocus sativus* L.) and endurance training on mitochondrial biogenesis, endurance capacity, inflammation, antioxidant, and metabolic biomarkers in Wistar rats.

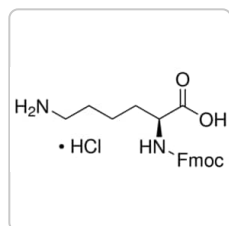
Maryam Akbari-Fakhrabadi et al.

Journal of food biochemistry, 43(8), e12946-e12946 (2019-08-02)

We aimed to evaluate the effect of saffron (*Crocus Sativus* L.) treatment on endurance capacity, mitochondrial biogenesis, inflammation, antioxidant, and metabolic biomarkers in Wistar rats. Forty male rats were allocated equally into four groups: Saffron, Exercise and Saffron, Exercise and

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PRODUITS CONSULTÉS RÉCEMMENT

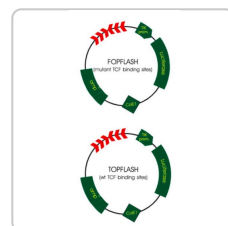


Sigma-Aldrich

17290

Fmoc-Lys-OH hydrochloride

≥98.0% (HPLC)



Sigma-Aldrich

17-285

TCF Reporter Plasmid Kit

Set of transfection grade T cell factor (TCF) reporter plasmids for use in TOPFlash and FOPFlash wnt/b-...

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Notre équipe de scientifiques dispose d'une expérience dans tous les secteurs de la recherche, notamment en sciences de la vie, science des matériaux, synthèse chimique, chromatographie, analyse et dans de nombreux autres domaines..

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