



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

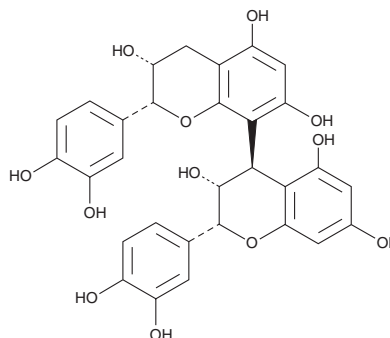
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# PRODUCT INFORMATION

## Procyanidin B2

Item No. 19865

<b>CAS Registry No.:</b>	29106-49-8
<b>Formal Name:</b>	(2R,2'R,3R,3'R,4R)-2,2'-bis(3,4-dihydroxyphenyl)-3,3',4,4'-tetrahydro-[4,8'-bi-2H-1-benzopyran]-3,3',5,5',7,7'-hexol
<b>Synonyms:</b>	(-)-Epicatechin-(4β→8)-(-)-epicatechin, Proanthocyanidin B2
<b>MF:</b>	C <sub>30</sub> H <sub>26</sub> O <sub>12</sub>
<b>FW:</b>	578.5
<b>Purity:</b>	≥98%
<b>UV/Vis.:</b>	λ <sub>max</sub> : 281 nm
<b>Supplied as:</b>	A crystalline solid
<b>Storage:</b>	-20°C
<b>Stability:</b>	≥2 years
<b>Item Origin:</b>	Plant/Grape seeds



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Procyanidin B2 is supplied as a crystalline solid. A stock solution may be made by dissolving the procyanidin B2 in the solvent of choice, which should be purged with an inert gas. Procyanidin B2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of procyanidin B2 in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of procyanidin B2 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of procyanidin B2 in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Procyanidin B2 is a phenol and a dimer of (-)-epicatechin (Item No. 11807) that has been found in apple pomace and has diverse biological activities.<sup>1-4</sup> It inhibits MCF-7 breast cancer cell proliferation (IC<sub>50</sub> = 19.2 μM).<sup>1</sup> Procyanidin B2 scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) and superoxide anion radicals in cell-free assays.<sup>2</sup> It inhibits LDL oxidation *in vitro* by 79.5 and 98% when used at concentrations of 5 and 10 μM, respectively.<sup>3</sup> Procyanidin B2 (100 mg/kg) prevents carbon tetrachloride-induced increases in serum aspartate aminotransferase (AST) and alanine aminotransferase (ALT) activities and hepatic injury in mice.<sup>4</sup>

### References

1. Avelar, M.M. and Gouvêa, C.M.C.P. Procyanidin B2 cytotoxicity to MCF-7 human breast adenocarcinoma cells. *Indian J. Pharm. Sci.* **74(4)**, 351-355 (2012).
2. Lu, Y. and Foo, L.Y. Antioxidant and radical scavenging activities of polyphenols from apple pomace. *Food Chem.* **68(1)**, 81-85 (2000).
3. Teissedre, P.L., Frankel, E.N., Waterhouse, A.L., *et al.* Inhibition of *in vitro* human LDL oxidation by phenolic antioxidants from grapes and wines. *J. Sci. Food Agric.* **70(1)**, 55-61 (1996).
4. Yang, B.-Y., Zhang, X.-Y., Guan, S.-W., *et al.* Protective effect of procyanidin B2 against CCl<sub>4</sub>-induced acute liver injury in mice. *Molecules* **20(7)**, 12250-12265 (2015).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/14/2020

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM