

# 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

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# PRODUCT INFORMATION



# (-)-Epicatechin Gallate

Item No. 11808

CAS Registry No.: 1257-08-5

Formal Name: 3,4,5-trihydroxy-benzoic acid,

(2R,3R)-2-(3,4-dihydroxyphenyl)-3,4-dihydro-5,7-dihydroxy-2H-1-

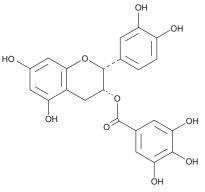
benzopyran-3-yl ester

Synonym: **ECG** MF:  $C_{22}H_{18}O_{10}$ FW: 442.4 **Purity:** ≥98%

 $\lambda_{max}$ : 206, 279 nm UV/Vis.: A crystalline solid Supplied as:

-20°C Storage: ≥2 years Stability:

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



#### **Laboratory Procedures**

(-)-Epicatechin gallate (ECG) is supplied as a crystalline solid. A stock solution may be made by dissolving the ECG in the solvent of choice, which should be purged with an inert gas. ECG is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ECG in these solvents is approximately 1, 10, and 14 mg/ml, respectively.

ECG is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ECG should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ECG has a solubility of approximately 0.50 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

The catechins, including (-)-epicatechin (EC) and (-)-epigallocatechin gallate (EGCG) (Item No. 70935), are polyphenols which are abundant in green and black teas. ECG is a natural catechin with a single galloyl group. Like EGCG, it inhibits the growth of cancer cells and has anti-inflammatory effects. 1-3 The hydroxyl groups of ECG contribute to its potent antioxidant activity and facilitate the killing of methicillin-resistant strains of S. aureus.<sup>4,5</sup>

#### References

- 1. Du, G.-J., Zhang, Z., Wen, X.-D., et al. Nutrients 4(11), 1679-1691 (2012).
- 2. Ravindranath, M.H., Ramasamy, V., Moon, S., et al. Evid. Based Complement. Alternat. Med. 6(4), 523-530 (2009).
- 3. Kürbitz, C., Heise, D., Redmer, T., et al. Cancer Sci. 102(4), 728-734 (2011).
- 4. Xu, J.Z., Yeung, S.Y.V., Chang, Q., et al. Br. J. Nutr. 91(6), 873-881 (2004).
- 5. Anderson, J.C., McCarthy, R.A., Paulin, S., et al. Bioorg. Med. Chem. Lett. 21(23), 6996-7000 (2011).

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

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

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, 03/17/2020

#### **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